

MOTOR AGE

Vol. IV. No. 12

SEPTEMBER 17, 1903

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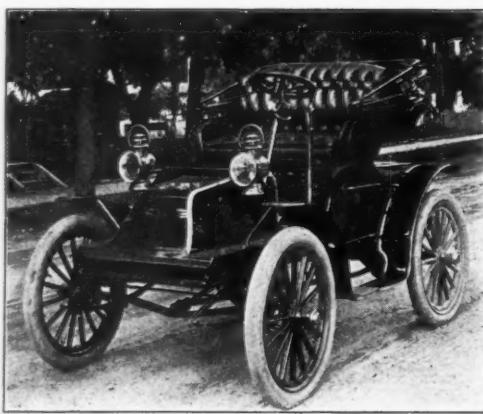


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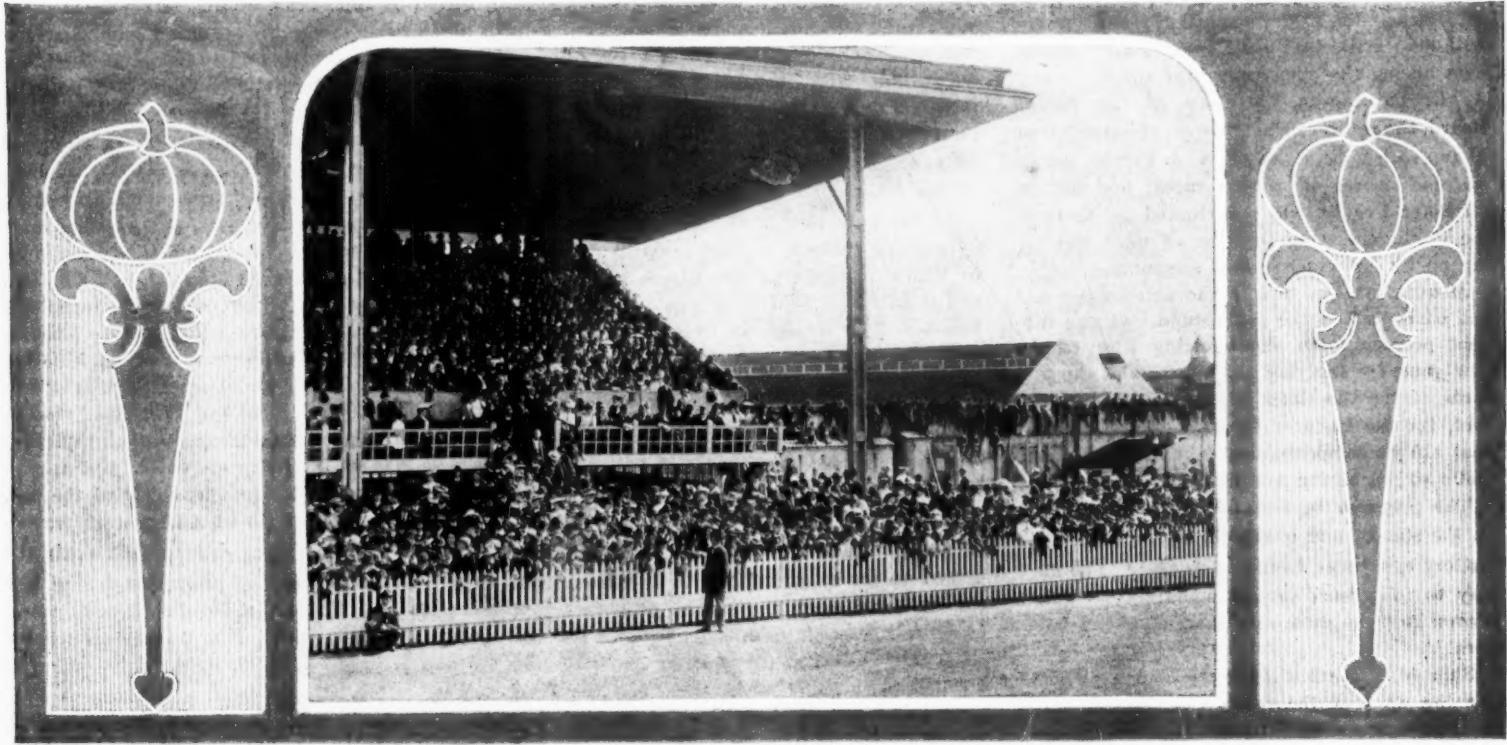
MOTOR AGE

VOL. IV. NO. 12.

SEPTEMBER 17, 1903.

\$2.00 Per Year.

FARMERS AND SOCIETY FOLKS JOIN IN CHEERS AT SYRACUSE



MOTOR AGE

Part of the Immense Throng at the Syracuse State Fair Meet

Syracuse, N. Y., Sept. 12—"Gee whiz! I swan if that air frog eatin' parley vous with that choo-choo wagon of his didn't beat the mile Major Delmar trotted here yesterday a whole minute!"

This from a goat-whiskered farmer follower of horse trots, pumpkins and such, who had been persuaded to forsake the prize pig pen long enough to see "how fast them automobillies really could go" on the track of the state fair grounds this afternoon, when Peter Prunty's foghorn voiced the time Jules Sincholle's Darraeq had seored in its exhibition mile.

"This here automobile racing" was an utterly new thing to the up York state rube, and he wasn't ashamed to say so. It was new, too, to some 400 of the social salt of Syracuse, who viewed the first contests of the kind in this vicinity, which were promoted by the town's hustling motor vehicle club, from the automobiles that lined the tan bark "lawn" and the boxes that fronted the grandstand—and new also to 12,000 others that crowded this same stand and another one, too, and were packed along the homestretch rail six deep besides.

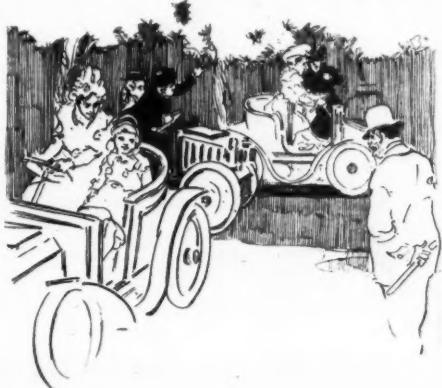
Automobile racing, be it said, there and then scored a great hit with the Salt city citizens and those engaged in agricultural pursuits in this section of the Empire state. Every one of the 12,400 went away satisfied that he had gotten his money's worth and ready to come again on automobile day next year—and bring another fellow with him, too—to see the sport.

Accidents at Detroit had robbed Syracuse of Oldfield and his Baby Bullet and Paige and his Decanville. The Packard Gray Wolf, the White

Snail and the Baker Kid were missing and missed—and missed, too, a fine track and worthy competitors in Jules Sincholle, Dan Wurgis, Frank La Roche and John Wilkinson.

There was record-breaking by the Oldsmobile Pirate—thanks to the hard pressing John Wilkinson's Franklin, former holder of the 5-mile record for cars under 1,200 pounds, gave Dan Wurgis, the Pirate's driver, in one of the most fiercely fought races ever seen on a track. Then, Jules Sincholle came near—within 2-5 of a second—of letting the Syraeans see real mile-a-minute going.

A feature of the meet was the enthusiastic participation of the members of the club and other strict amateurs in a hotly contested handicap and two races restricted to machines of certain makes. Altogether Syraeans took to automobile racing with a hearty hurrah that bodes well for the popularity of the racing game with Salt citizens in the future. No better track could be asked for and the excuses of a first attempt at race management belong to the promoters for the occasional delays that at times marred the continuity of the enjoyment of the spectators.





MOTOR AGE

Wilkinson on the Franklin Racer

Much of the credit of the affair belongs to C. Arthur Benjamin, the club's secretary, who was largely in evidence during the afternoon with his "smile that never comes off." Prominent among the other officers of the day were: A. R. Pardington, chairman of the Racing Board, the referee; Percy Owen, of international cup race fame, a judge; A. J. Picard, the inevitable starter of eastern races; and last of all Peter Prunty, who contributed his share to the intelligent comprehension of what was going on by his widely-famed announcing.

MOTOR AGE was seen in the automobiles and the boxes and in the grandstand. It had diligent perusers, who were getting wise to the new game by studying the stories and the pictures of the Cleveland and Detroit meets. In fact, for the truth of history, it must be told that the whole spectatorial section of the meet had a strong MOTOR AGE flavor to it.

The program boys distributed MOTOR AGES in the stands, and either through confusion or flattery even went so far as to cry: "The only way to tell them fast automobiles is to get a MOTOR AGE program with the names and numbers!"

Shortly before 2 o'clock, the hour announced for the start of the races, Dan Wurgis, with the Pirate, and John Wilkinson, with the Franklin flyer, came out for warming up spins. Both were loudly cheered. This showed the temper of the crowd. Their fast spins whetted its eager expectancy of the new game that was in a few minutes to be served.

Peter Prunty apologized for the absence of Oldfield and Paige. The excuses he gave seemed good ones and there was no hissing or grumbling. The new game was on.

WORLD'S RECORD MATCH RACE

All the other entrants in the 1,200-pound class at 5 miles were excusably frightened out of the contest by the appearance at the scratch of the fastest two lightweights in America. John Wilkinson, driving the 10-horsepower Franklin, which made the world's record for its class at this distance at the last Empire City track meet, was given the pole. Dan Wurgis, in the famous Pirate, which scored the world's mile straightaway record in its class of 1:06 4-5 on the Ormond beach last spring, took the outside of the track.

A great race was expected between the crack light weights and it panned out all that was anticipated for the better part of the way.

The flyers approached the line exactly even

up and were sent away on a beautiful start. The Pirate was the quicker in getting under way and took the pole before the first turn was reached. The Franklin got its headway an instant later, though, and jumped away in a fierce chase. The Pirate had 10 yards the better of it at the half and increased this to 20 yards as it flew by the stand at the end of the first round of the mile circuit.

As the pair tore down the back stretch the Syracusans cheered as their favorite pulled up to within 5 yards of the Pirate at the mile and a half and held it to the 2 miles. The Franklin flyer trailed the Olds at its rear tires until the turn before the 3 miles was reached, where it lost 5 yards. Rounding the first turn of the fourth mile Wurgis seemed to let out a kink or two of speed. His skeleton ghost increased its lead to 30 yards at 3½ miles and to 50 yards at 4 miles. All eyes were now turned on the flying frame that bore Wurgis. As though another cylinder of power had been turned on the speed-inspired thing dove around the turn and down the stretch at a rate that made fair ones clutch their escorts' arms, and beat the Franklin the greater part of the stretch, at least 200 yards. How fast the flyers were going may be judged from the fact that this 200-yard beating the Franklin got was equivalent to only 10 seconds in time. The Syracuse marvel was not disgraced, for the Pirate had to make the run in 5:49, a new

world's record for the class, taking the place of the former figures scored by this same Franklin at the Empire City meet. Future meetings between these two rivals promise to prove among the most exciting of the circuit meet races. The Pirate's time by miles was: 1:14 2-5, 2:24½, 3:31½, 4:40¼ and 5:49. The Franklin's time was 5:59.

SINCHOLLE DEFEATS LA ROCHE

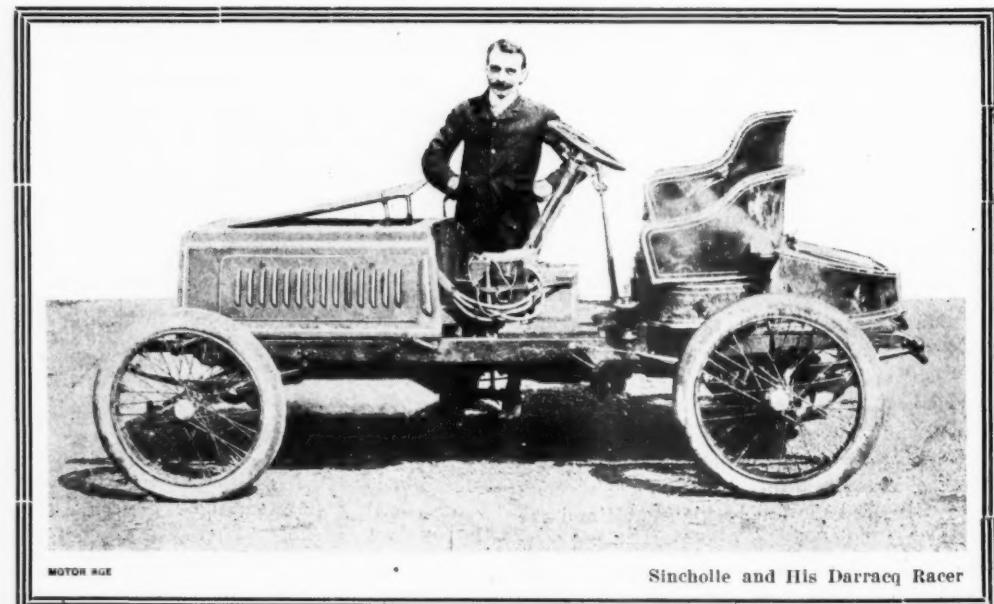
A triangular match at 5 miles with Jules Sincholle and Frank La Roche on Darracqs, and Henri Paige on a Decauville had been scheduled by the management as the star event of the meet. The absence of Paige and the Decauville, owing to their accident at Detroit, left the match a mere trial of speed between the two Darracqs, Mr. La Roche consenting to go against Sincholle with a machine whose condition as to speed and safety was, to say the least, problematical, so as to give the Syracusans all the return for their money possible. Mr. La Roche, by the way, told a MOTOR AGE man at the Yates house that he had been annoyed by the circuit crowds assuming from his name, machine and association with Sincholle that he was a Frenchman instead of the plain, everyday American manufacturer and importer he is.

Mr. La Roche, even though plainly outclassed and outspeeded by his mate, put up a lively little scrap and made some creditable time. Sincholle won the first heat, after leading each successive mile, by a quarter of a mile in 5:15 2-5, as against La Roche's 5:33 3-5; and the third heat as well by an eighth of a mile in 5:14 1-5 to La Roche's 5:22 1-5. The time by miles for these heats were: First, 1:03 3-5, 2:05 1-5, 3:08 2-5, 4:12 1-5, 5:15 2-5; third, 1:03 3-5, 2:06 1-5, 3:08 4-5, 4:11 2-5, 5:14 1-5.

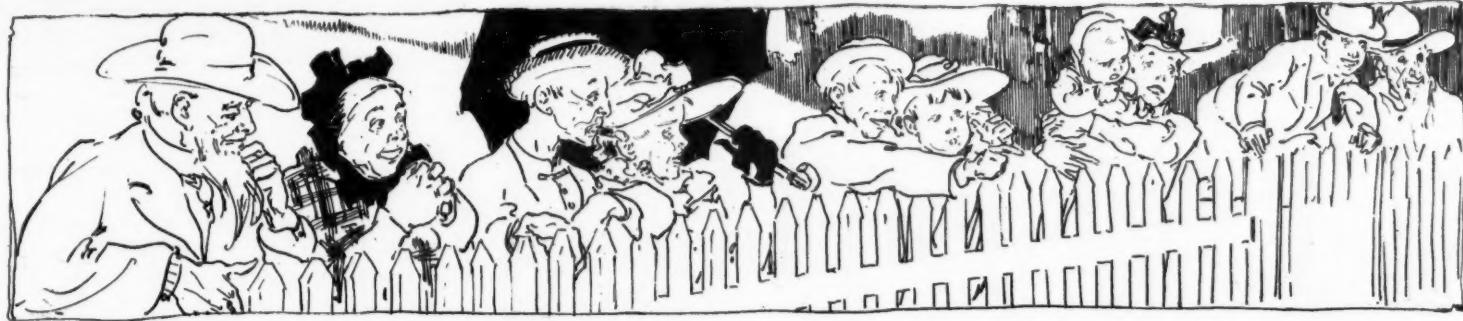
In the second heat many thought that Sincholle was giving the race to La Roche by a manipulation of the throttle. Toward the end, however, he seemed to be having real trouble with his engine falling behind fast from the third mile and stopping altogether in the last circuit. La Roche was leading by 200 yards when Sincholle quit. His times were: 1:18, 2:22 1-5, 3:31 2-5, 4:38, 5:44 4-5.

CLOSE TO A MILE A MINUTE

The fastest mile of the day was scored by Jules Sincholle with his Darracq in an exhibition mile. The figures scored with a flying start were 1:00 2-5, following a mile 1:01 2-5 to get a go for it.



Sincholle and His Darracq Racer



MOTOR AGE

"Up-State Yorkers" Were Eager and Appreciative Spectators

A 2-mile race for motor cycles was the opening event of the program. Seven power-driven two-wheelers faced the starter. They were George H. Curtiss, Hammondsport, N. Y., Hercules; R. C. Thurwachter, Syracuse, Indian; Nelson Flanigan, Syracuse, Hercules; A. S. Noonan, Rome, N. Y., Auto-Bi.; W. F. Murphy, New York, Indian; James B. Woodruff, Syracuse, Hercules, and George W. Butler, Buffalo, Auto-Bi.

The little fellows approached the line to a flying start in an excellent line. At the pistol Curtiss jumped into the lead, closely followed by Butler. At the half the Hercules led the Auto-Bi by 20 yards, the latter being 30 yards ahead of the rest of the string. At the mile Curtiss' Hercules was a hundred yards in the lead in 1:21, Murphy being half that distance ahead of Noonan; Woodruff and Butler following in order. It looked like a runaway for the Hammondsport flyer, when just before the mile and a half was reached it shut up like a jack knife. Trouble with the belt was said to have been the cause.

Going down the back stretch in the last mile Noonan's Auto-Bi showed a marvelous burst of speed. Jumping by Murphy as though he were anchored it swept around the turn into the stretch in a spirited sprint, beating Murphy by 50 yards. Flanigan and Thurwachter followed at intervals of 2 yards. The time for the 2 miles was 2:45½.

WINTONS SURPRISE EACH OTHER

Two Winton touring cars, driven by Syracuse club members, wound up a rather one-sided 5-mile race with a sudden reversal of form that brought cheers and laughter. The starters were H. H. Mundy, of Utica, and A. R. Petrie, of Syracuse. The former at once took the lead and gradually increased it up to 200 yards at 4 miles. Right after this, though, some one of the evils to which automobile flesh is heir befell the proud leader. The Syracusan came up without delay and proved that the race is not always to the swift by passing the crippled Utican and beating him out by a third of a mile in 9:55. The times made by Mundy while in the lead were: 1:56½, 3:47¾, 5:42¾ and 7:44¾.

Eight members of the Automobile Club of Syracuse put up a well run 5-mile race. It was a handicap with well distributed allotments in "jumps" of 1-16 of a mile each. They were strung out as follows: John Wilkinson, on a stock Franklin, was scratch; C. A. Benjamin and A. E. Petrie, ¼-mile; R. N. Cornwall and W. H. Dix, 5-16

mile; Oscar N. Hine, 6-16 mile, and H. W. Chapin and Forman Wilkinson, 7-16 mile. All drove 10-horsepower Franklins save Petrie, whose mount was a 15-horsepower Winton.

Cornwall led by 150 yards the first mile in 1:19, the others pushing him in order at the following intervals: Bex, 50 yards; Hine, 10 yards; Petrie, 10 yards; Forman Wilkinson, 10 yards, and John Wilkinson, 100 yards.

Cornwall increased his lead to 200 yards the second mile, which he made in 3:05 2-5. Petrie, Bex and Hine were in a bunch with the scratch man at their heels and the latter's namesake well up. The race was proving a merry and exciting scramble. Early in the third mile John Wilkinson shook the bunch and started in pursuit of the flying Cornwall, who covered 3 miles in 4:56. At this point scratch was within 30 yards of him and 150 yards ahead of Benjamin, who led Petrie by 10 yards. Bex was 50 yards further to the rear and Hine and Forman Wilkinson was practically beaten off.

Cornwall was caught and passed at 3½ miles. All this time a pretty fight was going on between Benjamin's Franklin and Petrie's Winton for third place in the run.

John Wilkinson finished his 4 miles in 6:36. At this point he led Cornwall by a hundred yards. Two hundred yards further back came Petrie, who led Benjamin 10 yards. At 200-yard intervals Bex, Hine and Forman Wilkinson followed in order.

John Wilkinson won the race by 100 yards in 8:23½. Cornwall beat Benjamin the same distance. Three hundred yards further back came Bex, who beat Hine 50 yards, he, in turn,

leading Forman Wilkinson by ½ of a mile. The times of the placed men were: Cornwall, 8:31; Petrie, 8:42, and Benjamin, 8:45¾.

R. M. Cornwall, of Syracuse, had an easy victory in the 5-mile race for Franklin stock cars. The other starters were: H. W. Chapin, Syracuse; Oscar N. Hine, Syracuse; Otto I. Leisy, Cleveland, and Forman Wilkinson, Syracuse. The winner took the lead at the pistol and increased it gradually to ½ of a mile at the finish. Wilkinson and Hine monopolized all the interest in the contest through a sharp scrap they put up for second place. Hine led by 10 yards the first mile and 50 the second. In the third, however, Wilkinson passed his rival in the home stretch and beat him 100 yards at the finish. Chapin dropped out in the last mile. Leisy's pace was better calculated for a transcontinental tour. Cornwall's times were: 1:49¾, 3:37, 5:25, 7:13¾ and 9:02¾. Hine covered the 5 miles in 9:20½.

LAST RACE THE BEST

There had been so many delays toward the end of the program that but comparatively few spectators remained to see the 10-mile free-for-all. There was no contest run during the day so replete with real interest to makers of racing machines and followers of the racing game. In it the two light American flyers were pitted against the two crack European Darracqs.

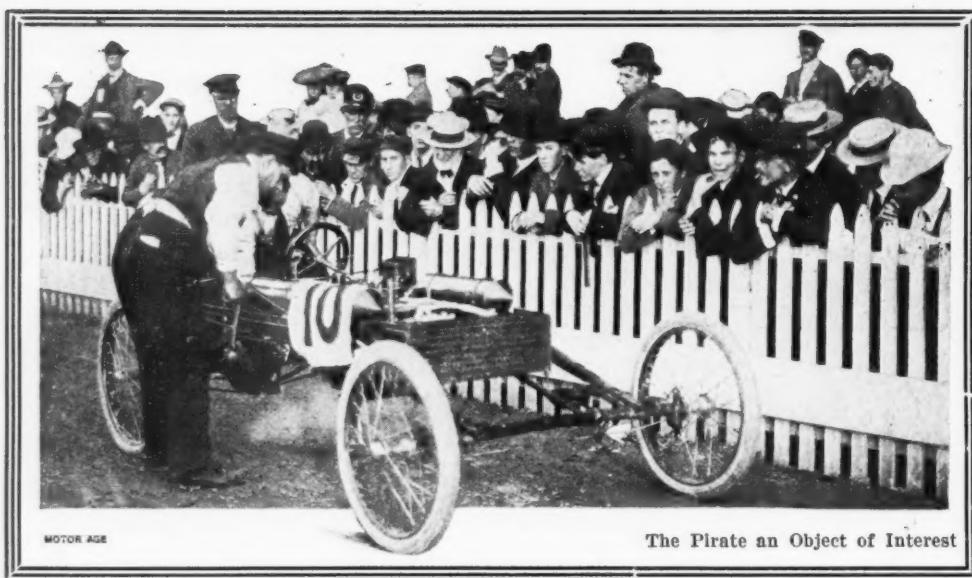
The start was a flying one, with John Wilkinson and his Franklin on the pole. Dan Wurgis and the Olds Pirate next, with Sincholle and La Roche and their Darracqs on the outside in this order. The little Oldsmobile jumped into the lead at the pistol, followed by Sincholle. The Yankee and the Parisian raced hub and hub around the turn. It was not until the back stretch was reached that the big fellow began to pull away from the infant racer. Sincholle reached the ½-mile pole 30 yards in the lead, and Wurgis on the Pirate surprised all by being 10 yards more than this in front of La Roche. The Franklin was trailing at the end of the string. In fact, it made a surprisingly poor showing in the race in view of its close scrap with the Pirate earlier in the day.

At the mile Sincholle had increased his lead over Wurgis to 50 yards and La Roche had cut down the little fellow's margin to 10 yards. In the second mile La Roche passed the Pirate on the back stretch and led it by 30 yards at the end of the second mile. Sincholle was 150 yards ahead of his mate and running away with the race in fast time—



MOTOR AGE

Wurgis and the Pirate at Close Range



MOTOR AGE

The Pirate an Object of Interest

1:07½ for the mile and 2:09½ for 2 miles. Sincholle kept gaining steadily on La Roche, while he pulled as steadily away from the Pirate. The Franklin was out of it altogether. It was lapped by Sincholle in the fifth mile and doubly lapped by all three before the end of the run.

During the fifth and sixth miles Sincholle was running on two cylinders, but picked up the other two again in the seventh mile.

In the homestretch of the last mile La Roche's machine got into trouble and reached the tape at a slow speed. Wurgis thought the race finished the lap before and lost the chance to profit by the Darracq's troubles and secure the second place. Sincholle beat La Roche a half mile, the latter finishing a quarter of a mile ahead of the Pirate, with the Franklin beaten off.

Sincholle's times were: 1:07½, 2:09½, 3:11½, 4:14½, 5:19, 6:25, 7:27½, 8:31½, 9:34, 10:36½. La Roche's time was 11:36½, to the slowness of which his trouble in the homestretch largely contributed.

Mile record trials with flying starts preceded the 10-mile free-for-all. The scores made were: Frank A. La Roche, Darracq, 1:04½; John Wilkinson, Franklin, 1:11, and Dan Wurgis, Olds Pirate, 1:08.

THE SUMMARY

First event—Two-mile race for motor bicycles. Won by A. S. Noonan, Auto-Bl; W. F. Murphy, Indian, second; Jas. B. Woodruff, Hercules, third. Time, 2:45 1-5.

Second event—Five-mile race for cars under 1,200 pounds, all motive powers. Won by D. Wurgis, Oldsmobile; John Wilkinson, Franklin, second. Time, 5:49. Time of Franklin, 10:59.

Third event—Five-mile race for Winton touring cars. Won by A. E. Patrie; H. H. Mundy, second. Time, 9:55.

Fourth event—Five-mile race for cars under 1,800 pounds. Won by Jules Sincholle, Darracq; F. A. La Roche, Darracq, second; D. Wurgis, Oldsmobile, third. Time, 10:36 2-5.

One-mile record trials—Jules Sincholle, Darracq, time, 1:00 3-5; F. A. La Roche, Darracq, time, 1:01 3-5; D. Wurgis, Oldsmobile, time, 1:08 1-5; John Wilkinson, Franklin, time, 1:11.

Fifth event—Five-mile handicap for members of the Automobile Club of Syracuse. Won by John Wilkinson, Franklin, scratch; R. N. Cornwall, Franklin, 5-16-mile handicap, second; A. E. Patrie, Winton, ¼-mile handicap, third; C. A. Benjamin, Franklin, ¼-mile handicap, fourth. Time of winner, 8:23½.

Special match race, best two in three, 5-mile heats—First heat won by Jules Sincholle, Darracq; F. A. La Roche, second. Time, 5:15 2-5. Second heat won by La Roche, time, 5:44 1-5. Third heat won by Sincholle, time, 5:14 1-5.

winning horse ran 3 seconds under its own record, and that in the heat following the second automobile race the winning horse improved his time 1 second. The track management then said that would secure an automobile for the purpose of rolling its track, believing that automobilizing made the track much faster.

On the way home Friday several of the party stopped at the Lowell fair and the racing there resulted as follows:

Five-mile open—Won by W. E. Eldredge, Boston, Cadillac; J. Lardier, Lawrence, Orient Buckboard, second. Time, 11:01.

Exhibition 5 miles by White steamer. Time, 9:52; best mile, 1:52½.

Five-mile race for gasoline cars—Won by W. E. Eldredge, Boston, Cadillac; E. H. Hylan, Lowell, Peerless, second.

Five-mile motor cycle race—Won by F. M. Perkins, Lowell; A. H. Bachelder, Lowell, second; John Morin, Lowell, third. Time, 10:15.

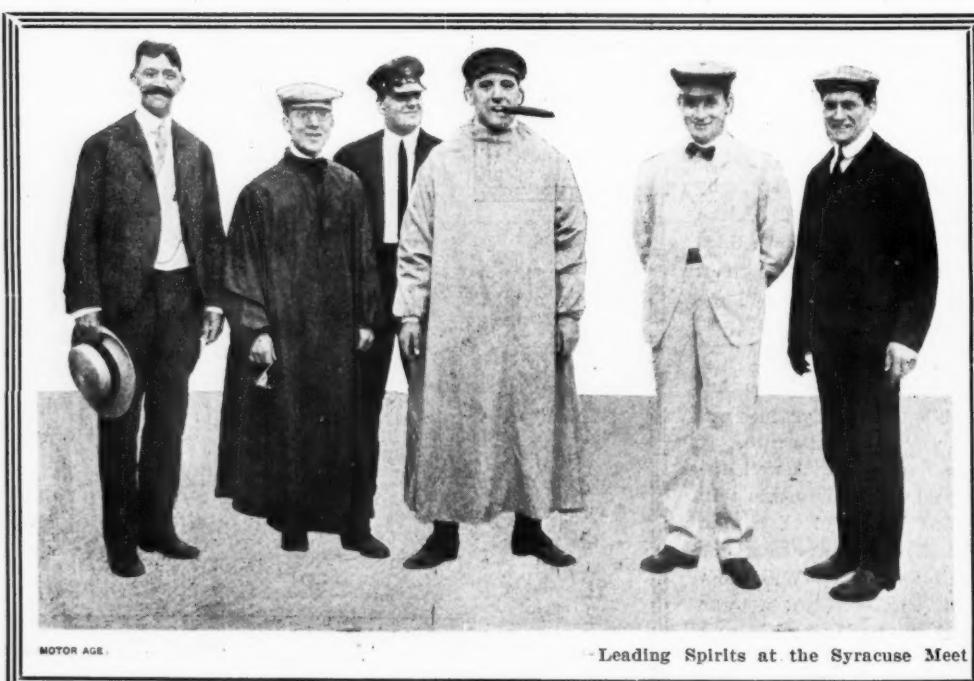
Five-mile race for touring cars—Won by A. S. Morrison, Boston, Peerless. S. M. McDermott, Boston, Peerless, second; W. E. Eldredge, Boston, Cadillac, third. Time, 11:15.

One-mile exhibition by Lewis Ross, Stanley steamer. Time, 1:54.

FATAL ACCIDENT AT MILWAUKEE

The automobile races at Milwaukee, Wis., in connection with the State fair last week, were spoiled by a combination of bad weather and a fatal accident. The events for Thursday were postponed until Friday because of the unfortunate accidents at Detroit, which delayed the arrival of the professional racers who were expected. On Friday the track was heavy and muddy, and the automobile races were put off until the last moment. The horse races were run first, and it was 5 o'clock before the automobiles came on the track. By that time the people were beginning to go home. The only race run was a 5-mile open in which C. B. Frayer, of Chicago, with a 24-horsepower Columbia was first, his time being 8:21. A 24-horsepower Stearns belonging to Mr. Allis, of Milwaukee, was second and George Odenbrett's Winton was third. The other races were called off.

On Saturday the exhibition race with Tom



MOTOR AGE

Leading Spirits at the Syracuse Meet



MOTOR AGE

Start of Open Race at Detroit Last Week

Cooper's Red Devil was begun by Frank Day, who had made his racing debut at Detroit. Day made two circuits of the track before the starter gave the word. He made the first half in 32 seconds, and the first mile in 1:04. The 2 miles were covered in 2:10 and three in 3:15. Suddenly as he rounded the last curve of the fourth lap Day lost control of the machine and an instant later he was seen to be pitched from the car high into the air. The machine dashed into the fence, breaking down posts and bars before it came to a halt. When Day was picked up it was found that almost every bone in his body was broken and his skull was crushed.

The theory advanced by the owners of the machine is that the track was in bad condition and that a front wheel struck a post. Some of the spectators think that the right front tire became loose as the machine rounded the curve, and that Day, in order to relieve the pressure on it as much as possible, steered as near the outside fence as he could, hoping to get through without accident. The disabled wheel plowed a furrow 3 inches deep for 8 feet in the surface of the track. Poor Day never regained consciousness. This fatality, of course, ended the racing at Milwaukee.

THEY RACE FOR FRANKFORTERS

European Motor Car Drivers of Note Try Their Hand at the Track Game and Please the 20,000 Spectators

Frankfort-on-Main, Germany, Aug. 30—The automobile races which took place on the Oberforshas race track this afternoon under the patronage of the Frankfort Automobile Club, were witnessed by 20,000 spectators who had come from all parts of Germany, and even from neighboring countries.

While not the first European track meeting, it was, however, the only really important and successful one that has yet taken place and will very likely lead to the building of a regular motordrome in Frankfort. There were ninety-eight entries for the nine events, but for some reason or another the number of starters was small. Nevertheless the races were interesting and fairly fast, considering the abominable condition of the track, which was extremely rough.

The crowd behaved splendidly and seemed to understand the possibility of accidents. The police force was not adequate for the occasion, but every German seemed to be an officer of the law under the circumstances, for one could be seen walking along the fences telling people not to lean over or not to sit on the fences.

The last race on the program, limited to the first three in each of the two preceding events, was the most interesting and important event. It was for the Peter cup, a beautiful art work donated by the German tire maker, Louis Peter,

which must be won twice in succession by the same person to become the property of that party. Willy Poegle, the German amateur driver, won the race on a Mercedes racing car.

The summary of the races is as follows: First event—Three miles, for motor cycles. Won by Phleitlens on a 3½-horsepower Antoine in 4:44, by several hundred yards.

Second event—Five miles, amateur, for cars up to 10-horsepower, to carry two passengers and the owner to drive himself. Won by Fritz Opel on a 9½-horsepower Opel-Darracq car, in 7:43. L. de Goulard on a 9½-horsepower Benz was second and H. A. Opel on a 9½-horsepower Opel-Darracq third. The winner had trouble with his car at the start and lost almost ¼ mile before he was able to go ahead; once under way he simply outclassed the others and passed to the front about two laps before the finish. He won by half a lap.

Third event—Five miles, professional, for cars up to 10 horsepower, carrying two passengers. Won by Ricordi on a 9½-horsepower Benz, one lap, in 7:42 3-5; Adam Opel, 9½-Opel-Darracq, second. It was a runaway race.

Fourth event—Five-mile handicap for members of the Frankfort Automobile Club, for all classes of cars. Fritz Opel with a handicap of 2½ miles was first on his Opel-Darracq, in 14:15 ¼.

Fifth event—Eight miles, amateur, for cars up to 16 horsepower. Won by F. Adler on a 15½-horsepower Adler car in 12:53 1-5.

Sixth event—Eight miles, professional, the motor to be started after the starting signal. Won by W. Joerns on a 15-horsepower Opel-Darracq in 11:09 1-5. Second and third places were also secured by Opel-Darracq cars.

Seventh race—Ten miles, amateur, for cars up to 60 horsepower. Willy Poegle on Jenatzy's Gordon Bennett Mercedes racer took the lead and amid the cheering of thousands of enthusiastic spectators circled around the track at top speed, closely followed during the first 3 miles by Barbaroux on his 45-horsepower Benz racer. The superiority of the Canstadt car was, however, too great, for it went ahead after the third mile and was never overhauled, winning easily by ¾ of a mile in 12:55 1-5. E. Bugatti on a 45-horsepower de Dietrich was a far away third.

Eighth event—Ten miles, professional, for cars up to 60 horsepower. This was another Opel-Darracq win, as the two first places were captured by Beconnais and Willman, both riding 35-horsepower cars. Beconnais covered the distance in 13:23 1-5.

Ninth event—Ten miles, for the three first of each of the two preceding races. Like in the other race in which he started. Willy Poegle started at full speed. It was a walkover for him, as he finished his tenth mile just when his closest competitor began it.

CLUB'S PROGRESS

The present Frankfort Automobile Club was formed June 10 from the old Automobile Club of Frankfort, which was organized in the latter part of 1898. There are sixty active members and seventy associate members. The club has organized the first automobile show of Frankfort which took place July 14 to August 12 in 1900, and made the club richer by \$2,500. Last year, the first track race meeting of the club was given. Since then the Frankfort club has been accepted as a member of the German Automobile Association and is taking a leading part in all automobile matters in the south of Germany.

FIVE INJURED AT ZANESVILLE

Zanesville, O., Sept. 10—The bursting of a tire on the Mohawk racing automobile of Carl Fisher, of Indianapolis, Ind., yesterday, resulted in the injury of five people. Fisher and Earl Kiser were driving on the track preparatory to giving an exhibition 5-mile run. The car was going about 40 miles an hour, and as it swung into the home stretch the friction on the front tires due to the lateral strain of making the curve was so great that one of them burned through and burst with a loud report. Instantly the machine became uncontrollable and dashed into the fence at the side of the track. Two men were seriously injured and a number received slighter injuries. The car finally collided with a wire fence and was totally wrecked. Neither Fisher nor Kiser were hurt, although both of them were thrown.

Seven officers of the Austrian army are studying the construction and usage of motor cycles in a leading Austrian factory. They are there practically as workingmen, helping in the manufacture and thus going through all the different stages until the machine is completed. Another delegation of officers has been engaged in a similar way in an Austrian automobile factory.



MOTOR AGE

The Track at Frankfort, Germany

MOTOR AGE

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ON THE RACING SITUATION

Two injured at Cleveland, one killed at Detroit, one killed at Milwaukee, and five injured—two perhaps fatally—at Zanesville, O., is the record of last week in American automobile track racing.

A serious situation is presented—one that must be faced and faced bravely by automobileists. Not alone because of the effect upon the sport must the whole motor fraternity bravely consider these facts in marking out its future course, but because, also, of the greater point at stake—the status of automobiling in general society.

Easy it would be for us all to turn cowardly, perhaps shamelessly, away from the issue that has arisen, almost in a twinkling, to mar the heretofore smoothly running character of track racing; but the honor of the sport, the honor of automobiling and the safety of the industry depends more or less upon the manner in which we meet this situation and answer the question: "What of racing?"

Lives are precious, and dear indeed would be the achievements of the sport if bought at the price of human breath. It must not be.

The accidents of last week have shown the eminent peril in which the sport stands; its insecure position between popular acceptance and popular condemnation.

Nor is MOTOR AGE pessimistic and disloyal to the interests it represents.

Abruptly has the sport been called upon to make its future; and calmly, carefully, but decisively must a just and creditable course be chosen.

There is no alternative, save at the expense of lives and at the sacrifice of honor.

Of the recent deplorable accidents little need be said. They are lessons—perhaps the teacher, Providence.

Without blame upon any one they have simply occurred to mark the limit of safety in track racing—to accentuate the fact that mile-a-minute racing on the regulation mile tracks of this country has passed the boundaries of security.

Just so did loss of life warn Europe that the interdicted Paris-Madrid race had brought open automobile road contests to a point in their evolution where each success, each record was bought at a price too dear to pay.

Automobiling stands unaffected. Automobile track racing still stands a king among sports. Its method of conduct, only, is marked by a serious demand for change.

Greater, perhaps, to the spectator than any other test of speed is the supreme spectacle of

two, or three or a half-dozen animated engines jumping from a swirl of dust straight for the goal.

Great the skill of those who pilot these Leviathans in their work! Great the charm! Great the whole affair! Great even, and magnificent, when the hand of death quivers over the situation as though fighting with human skill for the mastery!

But the power of these racing monsters, the skill of these most skillful of sportsmen, and the fascination of these most marvelous battles of locomotion have not become a part of our society to be swiftly hurled down to the level of the arena.

They must be placed upon a safer, surer plane than that formed by the unstable conditions under which the races are now conducted.

Briefly, mile-a-minute motoring has proven itself too great and glorious a thing to be cramped to the limits of 2-minute tracks.

It can be run there—it has been run there. Great, plucky drivers, with nerves of the same material as that of their motors, have guided their cars safely just by the brink of death. And they have fallen.

So slight need be the accident to send racer, driver, spectator close to the shadow of death that but a hair divides security from peril. Too fast, too fast, indeed, is automobile racing for flat, 1-mile tracks.

Here, then, out of the ashes of a sacrifice arises the quickly perceived truth—automobile racing needs reconstruction.

True, it may be continued as in the past, with accidents scattering and few, or only extremely rare. But this is daring fate—and death.

Away out beyond racing lies the field of universal automobiling. Scattered throughout its broad acres the sage brush of public prejudice trips and hinders progress. The over-ruling forces must be gentle to down this antipathy. Not the knives of careless freedom and disregard must cut the paths. They never can.

Recklessness of a few has already shown what selfish driving can do to retard the progress of honest, gentlemanly automobiling. Our over-stringent laws can be traced in most cases to the recklessness of a small minority.

For motorists to foster dangerous track racing would be for them but to tie more knots in the restrictive bonds of unfair legislation; to increase strained popular opinion and to

add more darts to the quiver of the journalistic free lance.

Then, again, automobile track racing may be discontinued; but this is both undesirable and unnecessary.

The contests of pure speed may be all powerful in their ability to claim public attention. Speed of any form is entralling. When presented in the most modern of all its forms it cannot fail to conquer. The manner in which all of the great track races have set thousands to marvelling is proof of their magnetic quality.

It is unnecessary to discontinue such a desirable sport simply because it is entirely possible to rid it of its dangers. The racing itself is not bound to be dangerous.

In the conditions under which it has been conducted has the danger lurked, ready to burst into evidence at any moment.

Again, the situation declares for reconstruction.

Reconstruction of track racing means the establishment of suitable tracks—nothing more.

The horse trotting and running tracks have never been suitable for automobile racing. The fact is more evident now simply because the progress of the sport has passed the limit of the adaptability of these tracks when utilized for a sport for which they never were intended.

It is no more reasonable to suppose that a substantially flat, mile track, built to sustain speeds of not more than 35 miles an hour, should be suitable for travel at 65 miles an hour than it would be to suppose that the Empire State Express could leave its track of steel and be run with safety on the gravel way of the Erie canal tow path.

At Syracuse, N. Y., last Friday, Major Delmar shook the horse racing world with a tremor of delight by the magnificent way in which he plunged around the state fair ground oval. The very next day Jules Sincholle drove a Darracq racing automobile around that same track exactly a minute faster to the mile, and thus in practically half the time.

A dangerous, unnecessary and unreasonable strain has consequently been placed upon the automobile racers, both steed and man.

Automobile racing demands new avenues for its exploitation. It demands a 2-mile track, wide, with long radius turns and high banks.

When horse racing became an established sport the communities in which it grew to be popular provided special tracks best suited to its peculiar needs.

When bicycle racing burst into full bloom, engineers and those practically experienced in the sport bent every effort toward the construction of special speedways which would render its unlimited indulgence safe, profitable and creditable in every respect.

Automobile track racing is just now a homeless sport in dire need of the same facilities for its untrammeled indulgence.

Here is the turning of the ways when motor racing must leave the paths intended for other and lesser sports, to fight out its great speed struggles on fields truly its own.

It is sad that death had to come to hurry the reconstruction of the sport, but the sacrifices having been made let the sport honestly and quickly rise to its own plane in the method of its advancement.

Perhaps not again in a hundred years will such a succession of accidents occur as those which marred last week's sport. But man knoweth not these things and the wise way is the safe way.

A REMINDER THAT

FOUR YEARS AGO LAST WEEK

The first copy of MOTOR AGE was issued.

THREE YEARS AGO LAST WEEK

John Brisben Walker made the second ascent of Pike's Peak, driving a Mobile up the cog railway.

TWO YEARS AGO LAST WEEK

The New York-Buffalo Endurance run was abandoned at Rochester in due respect to martyred President McKinley, who was assassinated at Buffalo that week.

ONE YEAR AGO LAST WEEK

Alexander Winton on the original Bullet established the mile track record of 1:02 1/4 at Cleveland's first automobile race meeting on the Glenville track.

PUSHING DEFINITE ORGANIZATION

New York Automobilists Take Another Step in Forming Long Pending State Association—Disagree on Representation

Syracuse, N. Y., Sept. 15—Another step in the formation of the New York State Association of Automobile Clubs was taken Saturday night in this city when President Hurlburt W. Smith was given power to appoint a committee consisting of one member from each of the clubs represented to frame a constitution and by-laws. This committee is to report at a meeting to be held here as soon as its work is completed. President Smith will announce the committee in a few days.

The clubs were represented at the meeting by the following delegates: Buffalo, William H. Hotchkiss, F. J. Wagner and John M. Satterfield; Utica, A. J. Baechle; Albany, O. A. Quayle and C. M. Page; Long Island, A. R. Pardington; Auburn, W. A. Waite; Syracuse, W. L. Brown, H. W. Smith and F. W. Elliott.

The only question about which there is a difference of opinion is the matter of representation. The Buffalo delegates argued that as the Buffalo club was larger than the other "up-state" clubs, having 305 members, its voice in the association should be of more account than that of the smaller clubs. It wants representation in the state body according to membership, or, as Mr. F. J. Wagner put it, "The representation fixed similar to that of the house of representatives rather than that of the senate, where each state has the same number of representatives." This plan is opposed by the Syracuse contingent and the other smaller clubs on the ground that the whole association would thus be run by Buffalo and New York. Mr. Hotchkiss, of Buffalo, maintained that the representative on the membership basis was the best, as it would be a stimulus to the clubs to get new members so that they could have greater representation. He said that there was hope for the smaller clubs, for they could take in members from the surrounding towns, just as Buffalo had members from Tonawanda and Niagara Falls. The system of the L. A. W. was also brought up.

This matter will have to be threshed out by the committee which President Smith will appoint. There may be a diversity of opinion, in which case two reports will be presented. In order to form an association all the clubs will have to give their consent to the constitution, and it is hoped that some arrangement may be made that will be satisfactory to all concerned. The Buffalo contingent does not want to control the club in order to elect what officers it prefers, according to F. J. Wagner,

who says that the present officers are satisfactory to Buffalo. It recognizes that H. W. Smith and F. W. Elliott, of this city, have worked hard to form an association and deserve a large amount of credit for their energy.

The following letter from Julian A. Chase, president of the American Automobile Association, was read by Secretary Elliott, showing the attitude of that body on the Association:

Frederick M. Elliott, Secretary Automobile Club of Syracuse—I was pleased to learn of the conference with Winthrop E. Scarratt concerning the formation of a New York state automobile association and consider that the participants deserve thanks for the endeavor to bring about a development of automobile unity, which I think not only very desirable but also absolutely essential for the work which is before the users of motor vehicles. A state unity is imperative as we now see it and as necessary, or more so, is a union of the states in a strong national body.



Pulling Dr. Lyman's Car Out of the Canal

The plan outlined seems to meet the needs of the situation and unless further study gives me new points of view, I shall heartily support this plan, which can be carried out on the part of the American Automobile Association under its present constitution and by-laws without delay, I think. Allow me to congratulate you upon the personal service which you are rendering in the good work.—JULIAN A. CHASE.

Mr. Pardington said that the Long Island Automobile Club wanted to come into the state association and help in the work of uniting the 8,000 automobile owners that are registered at Albany. The Rochester club was to have been represented by Lee Richmond, but he was unavoidably detained.

Mr. Wagner said that the Buffalo club expected to have 500 members before the first of the year. The reorganization and infusion of new life into the club has increased its membership from forty-two to over 300 within a short period.

The desire was expressed by all the clubs to act in connection with the American Automobile Association and to become a state division of that body. Action to that effect will probably be taken when the association is completely organized.

A competition of speed indicators is being organized by the Mid-European Motor Car Union, of Berlin, Germany.

NEW YORK CAR IN THE ERIE CANAL

Open Bridge Causes Dr. Lyman's Panhard To Give Party of Four a Ducking at Syracuse—Injury Not Great

Syracuse, N. Y., Sept. 15—A peculiar accident which might have been much more serious than it was happened Sunday morning to a party of New York automobilists, when four men in a 24-horsepower Panhard plunged into the Erie canal.

The car belonged to Dr. John Grant Lyman, of New York, who ran it to this city Friday to attend the race meet Saturday. Dr. Lyman had been in Buffalo with his string of trotting horses, and took a spin to this city to join the bunch of automobilists who congregated here.

He started out from the Yates hotel early Sunday morning with his chauffeur and himself on the front seat and W. T. Rynard and Armand N. Brand, of New York, in the tonneau. Dr. Lyman was driving the machine at about 15 miles an hour when suddenly a bridge loomed up near the city limits. There was no warning signal anywhere and to all appearances the bridge was in shape to be crossed. Not until the car was at the brink of the canal did Dr. Lyman see that a boat was coming and the bridge had been raised. There was not time to stop and "Accoutered as he was, he plunged in" his only remark being: "Well, I'll be damned." The only

man in the party who couldn't swim was Mr. Brand, and he attempted to jump. He landed on the tow path in such a way as to break his ankle and then toppled over into the water. Dr. Lyman was pinned in the seat by the steering wheel, but made a frantic effort to free himself and succeeded by bending the wheel shaft forward. The chauffeur, A. Dietz, and Mr. Rynard immediately swam to where Mr. Brand had tumbled in and by putting a rope around him succeeded in getting him out. They cut away his shoe, summoned an ambulance and he was taken to the hospital, where it was found that he had a compound fracture of the left ankle. Then the party devoted itself to getting out the machine. It hired men who were on hand to dive and put ropes on the car and it was towed up the canal to a place where it could be pulled out. The MOTOR AGE photographer snapped a picture just as it was being landed.

It was taken to the garage of the Central City Automobile Co., where the damages were estimated at \$500, most of them being caused by pulling the car out. Dr. Lyman will return to Buffalo and his chauffeur will take the car there as soon as it is repaired. There is talk of legal action against the state for damages for not displaying a warning at the canal bridge.

CHIEF FIGHTER FIRST ARRESTED

The Washington Dealer Who Led Forces Opposing the New Motor Car Regulations Becomes the Initial Victim

Washington, D. C., Sept. 12—The new automobile regulations have been in force a week, and it is the irony of fate that the first person to be arrested for violating them was Carl J. Lockwood, the automobile dealer who sought by means of a court injunction to restrain the district commissioners from enforcing the regulations. Mr. Lockwood was charged with leaving his machine unlocked and without an attendant. He was required to leave \$50 collateral as security for his appearance in court. His case will be heard next week and a merry fight is promised.

The police have conducted a little quiet investigation to ascertain, if possible, whether there are any automobiles that are unregistered and unnumbered. So far as the department has been able to learn there is not a single automobile in Washington without a number. In enforcing the regulations the greatest trouble is anticipated in cases like Mr. Lockwood's and in cases in which the speed regulations are persistently violated. The superintendent of police, in talking with a *MOTOR AGE* man, stated that it was his belief that there was a general sentiment among the automobilists to obey the law.

Motor cyclists were under the impression that they were not included in the regulations, but John H. Warland, a well-known local motor cyclist, was arrested while running his machine on Pennsylvania avenue. His defense in court was that he did not know that motor cycles were included in the provisions of the law. The court held that this was an extenuating circumstance, and released Mr. Warland on personal bonds on condition that he secure a license and number at once and produce both in court, which he did. The publicity given to Mr. Warland's case served as a warning to other motor cyclists, and all proceeded at once to secure the necessary license.

MILITARY CHAUFFEURS EXEMPT

The district commissioners have just made a ruling to the effect that United States army chauffeurs are exempt from examination and license under the new automobile regulations. This ruling is the result of a communication sent to the commissioners by Major Seriven, acting chief signal officer of the United States signal corps. Under the present army regulations the commanding officer at Fort Myer, Va., has occasion at times to send a military automobile in the performance of public duty into the city of Washington and other points. This machine is run sometimes by one enlisted man of the signal corps and sometimes by another, there being a number of competent men. "It is not presumed," said Major Seriven, "that the commissioners intended that the automobile ordinance, which by general consensus of public opinion is necessary for the public safety, should be so construed as to be practically prohibitory to the use of automobiles for military purposes by the army of the United States, which would be the case if every enlisted man was obliged to obtain a certificate of his competency from every municipality."

Automobiles were used at the maneuvers at New London, Conn., and other points in New England last year, at Fort Riley, Kans., and

this year at Portland, Me., and Major Seriven does not believe that the drivers of these machines, who are enlisted men and subject to change from day to day, are liable to arrests for non-conformity with municipal regulations. Commissioner West, who has immediate charge of such matters, has taken the same view and has issued the necessary order exempting army automobiles from numbering and their operators from examination. These are the only exemptions that will be made, and operators of army automobiles will be subject to municipal regulations concerning speed, sobriety, the law of the road, etc.

PROPOSE COUNTRY CLUB HOUSE

Detroit Club Contemplates Moving Its Headquarters to Suburban Point—Council Wants 6-Mile Limit

Detroit, Mich., Sept. 14—The removal of the home of the Detroit Automobile Club is being contemplated. It is proposed to move the club to a location about 12 miles beyond the city limits, half way to Pontiac, the run to this city being a favorite of Detroit automobilists, there being good roads all the way, and some grades to test the climbing powers of the machines. An automobile supply station will be maintained, and another new feature will be the club dining room. The club now has over 100 members, and there are many names on the waiting list.

The council committee on ordinances has decided to report favorably on a 6-mile an hour speed regulation for automobiles within the half-mile limit, and a 10-mile speed outside this limit.

F. O. Paige, president of the Detroit Automobile Club, recently made a fast road trip on his two-cylinder Winton. Starting from Detroit at 9 a. m. he made the journey to Harbor Beach, a distance of 150 miles, in 8 hours and 15 minutes, running time, leaving the car only once for dinner at Port Huron. The roads were in poor condition the whole distance, but the journey was accomplished without an accident of any kind.

A popular outing for Detroit automobilists is to take a night boat trip to Buffalo, N. Y., and then drive the cars to Erie, Pa., where a stop is made for the night. In the morning the journey is resumed to Cleveland, O., over good roads, and the trip from there home is made by boat.

TRY SCIENTIFIC HANDICAPPING

A new plan for classifying power driven machines to insure close competition has been evolved for the 5-mile handicap at the Empire City track meet of October 3. The committee has decided that the machines shall have a standing start and the handicapping will be by distance. Each contestant will be allowed an assistant to help in starting.

The special entry blank requires each entrant to give bore, stroke and number of cylinders of the engine, number of revolutions of rear wheels on the high gear; the style of transmission, whether planetary gearing, individual clutches or sliding gears; the diameter of the wheels, make, size and weight of tires, weight of car ready to run; number of passengers to be carried and the style of body.

The Locomobile driven by A. M. Kline at Muncie, Ind., on Labor day won the finals in 2:15½. This is the third year the Locomobile has won the Labor day races at Muncie.

ADD ANOTHER DAY TO THE RUN

Schedule of the Reliability Trial Has Been Changed in Order To Allow 2 Days for Trip From Cleveland to Pittsburg

Because of the precipitous hills between Cleveland and Pittsburg it has been decided to lengthen the endurance run a day, thus allowing 2 days to make the journey between those two cities, instead of making that the final days' trip as at first contemplated. The last observation tour made by Secretary Harry Unwin, of the N. A. A. M., convinced him that it would be too severe a strain upon the drivers to attempt to cover the distance in a single day, and when he reported to this effect to Manager Miles, the change was made.

In order that the arrival in Pittsburg may be on Wednesday, October 14, in time for the contests arranged for the latter part of the week, the start will be made from New York a day earlier. The weighing of cars will take place on Monday, October 5, at the establishment of the New York Transportation Co., Forty-ninth street and Eighth avenue, and the run will start at 7 o'clock Tuesday morning, October 6.

DAILY HEADQUARTERS

The headquarters each evening will be as follows: October 6, Pine Hill hotel, Pine Hill; October 7, Bennett house, Binghamton; October 8, Nichols house, Bath; October 9, Iroquois hotel, Buffalo; October 10 and 11, Reed house, Erie; October 12, Hollenden hotel, Cleveland; October 13, Tod house, Youngstown; October 14, Hotel Schenley, Pittsburg.

As it has been impossible to obtain covered garages for the number of machines expected, except at Cleveland, where the Central armory has been secured, it will be necessary for operators to be supplied with waterproof covers for their machines.

Entries for the run close on Monday, September 22, and no entries will be received after 4 p. m. on that day.

Each car must be supplied with a New York, New Jersey and Pennsylvania license, blank applications for which may be obtained at the office of the N. A. A. M.

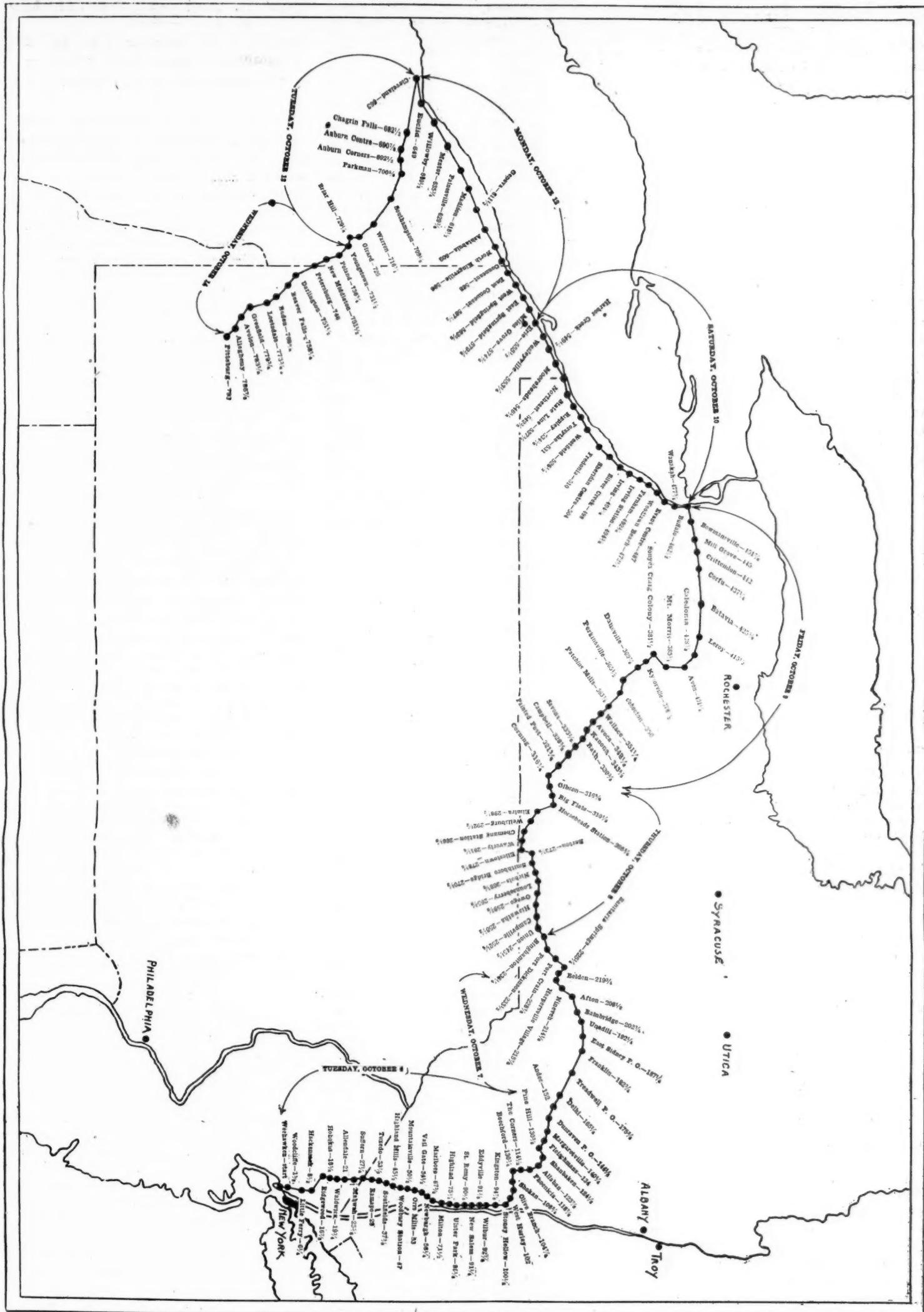
MARKING THE COURSE

It has been ascertained that 1,500 arrows will be needed to mark the course. The mayors of towns and presidents of villages along the route have been given notice of the time at which the machines may be expected to pass through, and have been asked to give notice to the people so that spirited horses may be kept off the road and accidents prevented.

Arrangements are already being made by the citizens and local clubs for a smoker and vaudeville show at Binghamton, an entertainment at Bath, a banquet at Buffalo and a spree of some kind at Cleveland.

R. W. Whipple, of the New York and Chicago highway association, a Binghamton man, was at N. A. A. M. headquarters yesterday. Signs will be put along the road 7 miles one way and 14 miles the other telling passers-by that the route being traversed is a part of the New York-Chicago highway.

It was recently stated in *MOTOR AGE* that the selling price of the new Oldsmobile delivery wagon, being introduced by the Olds Motor Works, of Detroit, Mich., is \$800. This is erroneous; the little car is listed at \$850.



Map Showing Itinerary of the October Reliability Run

CLEVELANDERS DISCUSS RACING

Tradesmen Express Opinions Concerning the Danger of Present Form of Track Contests—Tires Cause Most Accidents

Cleveland, O., Sept. 14—The list of recent accidents with racing automobiles has furnished the leading local topic of conversation for everyone interested in the sport, and while there are many who believe that such accidents may be prevented, there are others who express themselves in favor of the abandonment of the present style of automobile track racing.

Windsor T. White, of the White Sewing Machine Co., thinks automobile racing an unsuccessful venture and says it is a menace to life and limb. He says the machines are too fast for the tracks and the racing will have to be abandoned unless the tracks are put in such a shape that there will be no danger. Mr. White thinks endurance tests are bound to become more popular because they show up all the qualities in a machine, and the public has a better chance to decide on the merits than by seeing them go at breakneck speed around a smooth track.

TIRES SHOULD BE INSPECTED

George Collister attributes most of the accidents to carelessness. He says: "The blame for most of the accidents is laid to the bursting of tires. This is all nonsense. If proper care is taken and the tires looked after, the accidents can hardly occur. The drivers of the cars are usually not careful enough to inspect their cars before starting in a race. An inspector to look after every tire before a race is what is needed. In the majority of cases the tires are allowed to remain on a car until they reach the bursting point. I have seen machines go into races where the surface of the tire was worn entirely off and nothing but the fabric remained. A tire in that condition is liable to burst at any time. Before one of the races here, Sincholle, the French driver, came to the judges and asked to be excused from riding in that event. He pointed to one of his tires which was badly worn, and marked that he would break his neck if he attempted to race. He was excused, and his tires were changed before the next event.

A local authority, in speaking of the death of Frank Day, said that it had long been common talk among expert drivers that the Ford-Cooper car was extremely dangerous because of the peculiar steering gear and more particularly through its lack of a differential.

Barney Oldfield says that he will ride in the Gordon Bennet cup race in Germany next year and then quit the game. The track racing will give him the necessary experience which can be secured in no other way, and therefore he will continue racing until he has a try at the international cup.

CHICAGO RACES ABANDONED

Chicago, Sept. 16—The 2-day automobile race meet announced for September 28 and 29 at Washington park, Chicago, has been abandoned. These races were to have been a part of the program of the Centennial celebration, and extensive plans for making them successful had been laid. Their forced abandonment is a keen disappointment, for the Chicago club committee in charge had hoped that the co-operation of the Centennial committee and the promised appearance of the most noted racers would enable it to mark a change in

the chronicle of Chicago's race meets, hitherto partially or totally unsuccessful. The immediate cause of the dropping of the meet is the high handed demand of the Washington Park Club for a \$50,000 bond insuring the club against liability in case of accident, after a bond of \$50,000 had already been given against damage to the property.

The meet was to have been featured in the Centennial program and the committee in charge of the celebration had agreed to advertise the meet and to share its expense—for it was not to be run as a money making venture and the general admission to the grounds would probably have been free.

GOVERNOR'S CHAUFFEUR RUDELY "PINCHED"

Governor Bates, of Massachusetts, bids fair to become a confirmed automobilist. He takes a great deal of interest in motoring matters, especially since his chauffeur was arrested for speeding in Springfield a few weeks ago. On that occasion Governor Bates and a civil justice were riding in Springfield. The next day the chauffeur was summoned, but was never prosecuted for fast driving. Wednesday last the governor and a party of politicians went for a ride in three White touring cars, being piloted over the Blue Hill reservation by George Lowe, the local White manager; Harry M. Gordon and W. M. Frisbee. The illustration shows Governor Bates seated beside Mr. Lowe, who is at the throttle.

WANT AFFAIRS SETTLED

Application has been made in the United States court by the Marshall & Huschart Machinery Co., the McIntosh Hardware Corporation, and H. J. Sating to have the Krastin Automobile Mfg. Co., of Cleveland, declared bankrupt. The claims against the company aggregate about \$6,400. It was alleged that the company was insolvent and that a receiver was recently appointed. This receiver is now in possession and the creditors demand that the affairs of the company be wound up. The company has been manufacturing cars in an experimental way for 2 years.

FRENCH MOTOR CYCLE TEST

The Motor Cycle Club of France has decided to organize a motor cycle endurance contest, to last 6 days. Speed will be the last matter of consideration, whereas the more practical side will have the closest attention. The test will be open to motor cycles weighing not more than 110 pounds. Racing machines will probably be excluded. It is also intended that the machines shall be equipped with all the ordinary road appurtenances such as mud-guards, brakes, parcel carrier, tanks of a certain capacity, etc. Points will be given on the efficiency of the transmission, quickness of stopping and starting, grade climbing ability, regularity of running, comfort, full consumption and weight.

BOSTON TO NEW YORK IN ELECTRIC

F. A. Babcock, of the Buffalo Electric Carriage Co., of Buffalo, N. Y., is building a special electric automobile which he expects to drive from Boston to New York, starting from Boston on September 25. The distance is 235 miles and so far the through run has never been made in an electric carriage. The car will carry six people, and Mr. Babcock will be accompanied by his wife and son and three Boston people.

The capacity claimed for the car is 75 miles on one charge, and the cost of building will be about \$5,000.

PROPOSE A 150-MILE BOULEVARD

Chicagoans Will Endeavor to Get an Outer Belt System Entirely Encircling City—Motorists Are Especially Interested

The board of county commissioners of Cook county, Ill., contemplates an outer system of parks and boulevards around Chicago, the circumference to be about 150 miles.

THROUGH DIVERSIFIED COUNTRY

If the plans of the board materialize there will be a number of small parks, all connected by boulevards, thus giving Chicago a park system equalled by none. The feature of the proposition that will especially interest motorists will be the superior driving offered by such a system. The diversified scenery, ranging from the skyscrapers of the city to the wild, romantic glens along the north shore will make motoring a never-ending delight.

Within the belt of the proposed system lies Calumet lake, the ridge of the Great Divide, with views of the two canals, the Desplaines river and Salt creek. The bluffs of Glenoe and Winnetka afford a panoramic view whose beauties can be realized only by actual observation.

THE SYSTEM PLANNED

The general plan of the system would be a boulevard beginning with Michigan avenue, extending south to Pullman, Riverdale and Blue Island; then over the Great Divide, which separates the Calumet and Desplaines rivers. Turning westward, through Palos Park to Willow Springs, where the Illinois and Michigan canal, the sanitary canal and the Desplaines river flow side by side, these are crossed by bridges within short distances of one another on the stretch of road to Riverside.

From Riverside to La Grange is a beautiful stretch of country, and both these villages may be included in the outer belt. The northward journey is over the Riverside drive to Sheridan road and to all automobilists the picturesque beauty of the north shore is well known. The "Dead Man's curve" at Hubbard's hill offers an opportunity for skillful driving, while the speed limit warnings of the different villages along the way make interesting and instructive reading.

The present system of parks and boulevards in Chicago is totally inadequate to meet the wants of the people, and the plans of the projectors to make this proposed increase will meet with hearty approval by all interested in the welfare of the city.

CAPITAL AGE LIMIT DISREGARDED

Washington, D. C., Sept. 12—Much to the gratification of the automobile trade, the recently created automobile board has granted a permit to operate an automobile to James O'Toole, a 16-year-old boy employed by the Automobile Storage & Repair Co. It was this lad's case which recently brought up the question of prescribing an age limit in the issuance of permits to run automobiles. O'Toole passed one of the most creditable examinations of any of the applicants appearing before the board. He showed that he was well up on the subject of handling all classes of machines, and except for the question of age was clearly entitled to an operator's license.

W. Leslie Edison, head of the Edison Automobile Station, has just concluded arrangements whereby he will have the local agency

for the Holly motorette. Mr. Edison has two other deals pending, and they will probably be closed within the next week. The Edison Station is becoming a beehive of industry, the first week's business being all that could be desired.

E. H. Talbert has taken floor space at 814 Fourteenth street, N. W., where he will show and take orders for the Michigan automobile.

Recent visitors in Washington included W. J. Urquhart, secretary and treasurer of the Cleveland Automobile Co. It is understood that Mr. Urquhart secured a large order from the Willard Automobile Station for Cleveland cars.

Manager Foss, of the American Cycle Mfg. Co., has been in Hartford, Conn., for the past week attending the annual conference of managers of branch houses of that company. Among the recent good sales by the local branch is one of a Toledo two-cylinder car to Truxton Beale, ex-minister to Persia.

FOR PURPOSES OF DEFENSE

St. Louis, Mo., Sept. 14—The local club men are forming an association to be known as the Automobile Club of St. Louis Legal Defense Association. The purpose of this association will be to adjust claims and defend suits against its members, on account of alleged damages caused by them to persons or property, in the use of automobiles. The association will furnish its members, at its expense, with an attorney to conduct any claim and to defend any suit that may be brought against them, but the association will not pay any damages and costs that may be made against its members, nor any amount on account of such claims except the fees of the attorney who handles the case.

The dues are \$50 a year. Members must belong to the St. Louis Automobile Club.

RECENT INCORPORATIONS

Reliance Automobile Co., of Pierre, S. D., capital stock, \$250,000.

The Motor Storage Co., of Chillicothe, O., capital stock, \$12,000.

The Union Terminal Co., of New York, is seeking a western location for an automobile factory for one of its clients. No local financial aid is asked, the site being the principal object desired. The new company proposes to manufacture electric and gasoline cars.

Peerless Motor Co., of Lansing, Mich., capital \$13,500. To manufacture gas engines. Stockholders, A. S. Bennett, W. E. Cady, Claude E. Cady, L. L. Sattler, A. Simon, F. M. Thomas, Lawrence Price, Albert P. Walker, C. J. Prost, Jacob Gansley, C. G. Fleming, Emil R. Arndt and Jacob Segrist.

Max Groeschke recently drove from Dresden to Posen, Germany, a distance of about 225 miles, in 13 hours on a 1 1/4-horsepower motor cycle. The return trip was made in 12 hours.

IN THE YEAR OF ITS AWAKENING

St. Louis Finds Itself Without Enough Cars To Supply Demand—Stringent Laws Are Looked Upon As a Hardship

St. Louis, Sept. 12—This season will be remembered in the annals of the World's Fair city as the year of its awakening to the pleasure and value of automobiling. Light cars prevail in popularity, especially the Olds, which is seen everywhere. Steamers still retain part of their erstwhile popularity, and the White touring car has made many enthusiasts.

GRUMBLE AT LAW

Automobile owners express general dissatisfaction with the local and state laws regarding licenses and speed. Many flatly disregard the provisions requiring license numbers painted on lamps. The state law provides that a license be secured for each county in which the car is driven, and as an automobilist can hardly leave St. Louis without leaving the county, another license is required for riding outside the city limits. The local club attempted to fight the new laws, but their efforts were futile.

Most of the dealers are blaming themselves

orders, but intends to enlarge the plant soon and to increase the output to the requirements of the trade. Its patronage is mainly from other cities, and the principal buyers are said to be physicians.

The A. L. Dyke Automobile Supply Co. has been doing a rushing business from Maine to Australia all summer long and expects to continue to do so.

FARMERS VERSUS MOTORISTS

Owing to the hatred of the Missouri farmers for anything run by a motor, there will probably be no automobile races at the St. Louis fair this fall. A sad state of feeling exists between the St. Louis county farmers and St. Louis motorists—a feeling that the stringent law only fosters.

THE A. M. L. ROAD DANGER SIGNS

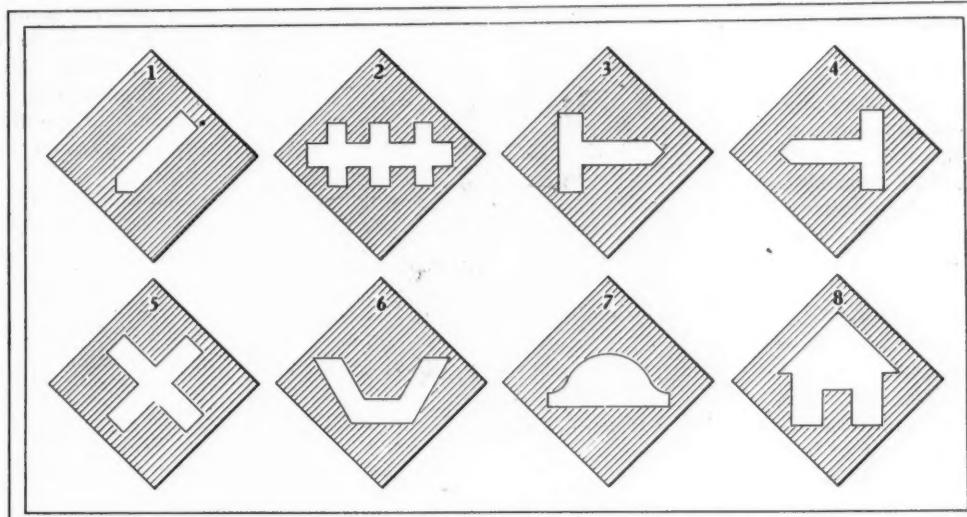
The American Motor League is following the course of the automobile and touring clubs of continental Europe and has devised caution signs which will be put up along highways at points where the character of the road demands reduced speed and caution in driving. The signs, like those of the European clubs, are emblematic of the character of the road, but these symbols are fewer in number and somewhat easier to comprehend.

The signs are to be made of heavily enameled sheet steel with black figures on a white background. Each sign will be 2 feet square and will be put up cornerwise, as shown in the accompanying illustration, this disposition being considered to be the most conspicuous. Each sign supporting post will be painted white to add to the effectiveness of the sign and so that it can be more easily distinguished at night by motorists.

The significance of each of the signs is as follows: No. 1 indicates the approach to a steep descent; No. 2 the approach to a railroad crossing; No. 3 the approach to a branch road to the right; No. 4 the approach to a branch road to the left; No. 5 the approach to a cross-road; No. 6 the approach to a ditch or an abrupt depression in the road; No. 7 the approach to a hummock or "thank-you-ma'm," No. 8 the approach to a city, village or town. A white blank sign will be used as a general caution signal indicating the proximity to some danger or obstruction not indicated by any of the symbols of the other eight signs—as for instance a wrecked bridge, a temporary excavation in the roadway, the blocking of the road by a disabled vehicle, or the presence of a crowd of people immediately ahead.

Each sign is to be placed at a distance of not less than 200 or of more than 300 yards from the point to which it refers.

To enable automobilists at points distant from the league headquarters to erect signs of wood similar in purpose to the regular metal signs, the league has issued specifications for the construction of cheap, easily made sign boards. These specifications will be sent broadcast upon application.



The American Motor League Caution Signs

for lack of forethought in not ordering more cars early in the season, as they have been unable to fill many orders. The Mississippi Valley Automobile Co., however, has given quick delivery in Oldsmobiles and has placed eighty-two of these runabouts this season. It also handles the Toledo, the Autocar, the Knox, the Searchmont, the Orient Buckboard and the Waverley and Columbia electrics. The Autocar, which has just begun to be recognized, is expected to prove a winner next season.

The Halsey Automobile Co. has sold over twelve Wintons this year and booked orders for another dozen. This company also handles the White, Peerless, Stevens-Duryea, Franklin, Cadillac and the Studebaker electric. Mr. Halsey complains of his lack of foresight in not ordering a greater number of Cadillacs and Wintons when he could get them.

Besides the above, the National Automobile Co. is selling the National electric and the Thomas cars, and the Franklin Automobile Co. has recently become established as agents for the Northern and the Locomobile.

LOCAL FACTORY TO BE ENLARGED

The St. Louis Motor Carriage Co., maker of "rigs that run," is several months behind in

BOSTON'S HITHERTO SLOWLY GROWING RETAIL AUTOMOBILE



Boston Branch of Winton Motor Carriage Co.

Boston, Sept. 14—There is no city in this country which has taken more sudden interest in things automobile than has the puritanical city of Boston. Conservative to a degree she was rather slow to adopt the automobile as a means of pleasure or for business purposes, but during the past season she threw aside her conservatism and must now be considered as one of the busiest automobile retail centers of the country.

RAPID DEVELOPMENT

Where once thrived the greatest local bicycle trade of the country there is now building up an automobile center, which, so far as its appointments are concerned, will probably be without a superior, even in the great metropolis of automobiling and of the nation. It is within the past 4 years that this condition has been made possible.

Four years ago the automobile establishments here could be counted on the fingers of one hand; now their number is legion, and the old "cycle row" has been transformed into "automobile row," Columbus avenue, with the adjacent thoroughfares being a veritable hotbed of automobile trading. The cars lined up in front of these stores in good weather collectively form a free, outdoor automobile exhibition.

MANY NEW GARAGES

Previous to this year Boston was evidently not considered a good field by automobile manufacturers, but now this impression has been found to be an error, and manufacturer after manufacturer has been pushing his way into the ranks of the local dealers, so that now one can get almost anything desired in the automobile line, either foreign or domestic.

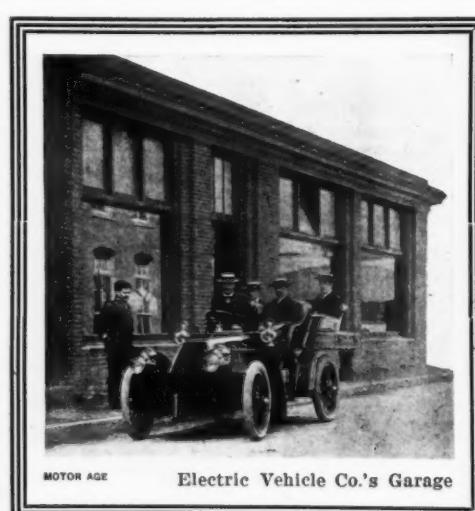
The volume of business done here this season has been really surprising, the demand being greater than the supply. The manufacturers and dealers have developed their businesses, widened their scope of operations, branched out into larger quarters, built new garages, and the result is that the automobile establishments here may be reckoned as equal to those of cities of similar size in any part of the United States.

ONE THRIVING CLUB

Boston formerly supported two local clubs, but neither made any pretense to do anything out of the ordinary. These were finally amalgamated into the Massachusetts Automobile Club, which is now a prosperous, energetic organization. Last winter the dealers organized and gave a show which seemed to awaken the people to a true realization of the advantages

and practicability of the automobile. The New England Automobile Association also held an exhibition, and later the Massachusetts Automobile Club held a race meet. All of these events had a great tendency to bring the motor vehicle into prominence.

The establishment of the Winton Motor Car-



riage Co. is presided over by Harry Fosdick. Mr. Fosdick was chairman of the dealers' legislative committee, a member of the show committee, and chairman of the dealers' race committee. He also holds a few automobile road records and on Decoration day won three out of four events in which he started at Read-

Early Apathy of the Trade and Sport Let Loose in a Grand Scramble To Excel in All Phases of Motoring



ville. The Winton garage has been completed only a short time, and is situated at the corner of Stanhope and Berkeley streets. The storage room and workshop are below the street level. The first floor is finished in antique oak, the private office of the manager being in the rear. To the left of the office is a waiting room for ladies in which may be found a public telephone and all modern improvements. The storage and repair department is reached from the street by either stairs or elevator. The workshop is complete in every detail, as is also the storage section, that machines of all class can be properly cared for.

LOCOS AND WHITES

The garage of the Locomobile Co. of America is on Berkeley street, near Tremont, and is in charge of Mr. McAlman, who is a pioneer in the automobile trade of the city. The salesroom is nicely arranged, and is well stocked with different models of Locomobiles. On the second floor is the workshop, the garage and the locker room. Mr. McAlman is a member of the Massachusetts Automobile Club, and also a member of the dealers' association. He won several club races at Readville with his steam machine.

The establishment of the White Sewing Machine Co., where George Lowe, generally known as "Pop," tells funny stories and sells White steamers, has undergone a great change, and now virtually occupies the entire street floor of the Odd Fellows' hall block. This store is at the junction of Berkeley, Tremont and Warren streets, giving three entrances to the garage. One section is given up entirely to the display of carriages, while another is devoted to storage, and the third to the repair shop. Mr. Lowe is an old bicycle man, and he has with him Dudley Marks, Watson Coleman and Aquilla Rich, of old cycle track fame, and also Harry Gordon, who takes care of the retail interests.

PROSPEROUS AGENCIES

W. E. Eldredge, formerly of Philadelphia, is pushing the interests of the Waverley electric, the Toledo and the Cadillac. The quarters of



Boston's Composite Garage, Automobile Headquarters

TRADE THIS SEASON ASSUMES METROPOLITAN PROPORTIONS

Four Years Ago Stores Could Be Counted on Fingers of One Hand—To-day They Are Legion—Garages Prosper



Mr. Eldredge are in the Pope building, and he is assisted by Messrs. A. D. Peck and Neal, as salesmen.

H. B. Shattuck & Son are situated at 239 Columbus avenue. Benjamin Smith is local manager, and is assisted by Fred Graves, Mr. Peabody and Mr. Ross. The firm handles the Oldsmobile, Autocar, Packard and, Searchmont.

Next door to Shattuck & Son is Alvan T. Fuller, who has the local agency for the Northern. He also handles the Orient Buckboard and motor cycle.

F. E. Randall is local representative for the Stevens-Duryea, and the Indian motor cycle. He also has an establishment at Chelsea.

Reed & Underhill are the representatives of the Knox. They are located on Stanhope street and have a good garage. Both are members of the Massachusetts Automobile Club. Mr. Underhill recently returned from a trip thro' Jamaica, while Mr. Reed is contemplating a tour of Yellowstone park.

THE COMPOSITE STORE

At Automobile Headquarters, on Stanhope street, are the two firms, Davis & Lewis and A. P. Bangs. The former is the successor to the late P. C. Lewis, father of Mr. Lewis of the new firm. This firm does a large store and repair business, and handles several lines of cars. Mr. Bangs is the local agent for the Franklin.

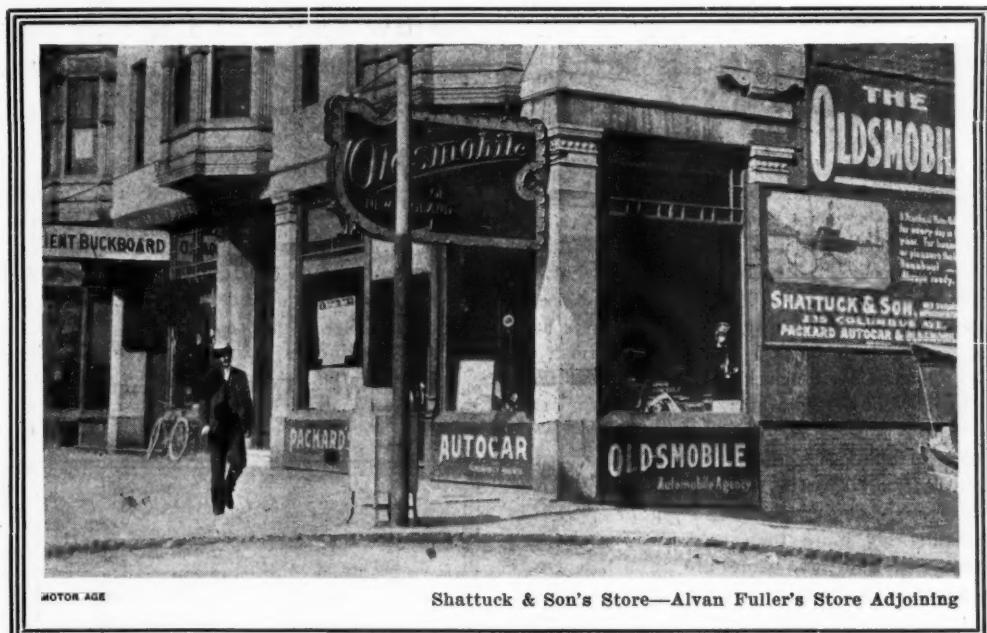
Grout Bros., the manufacturers of the Grout steam car, are also located here, W. D. Ham being the local representative.

In the same building is the Boston Automobile Exchange, at the head of which is S. K. Dingle. This firm does a general business, selling all kinds of machines. It will shortly remove to 15 Scotia street.

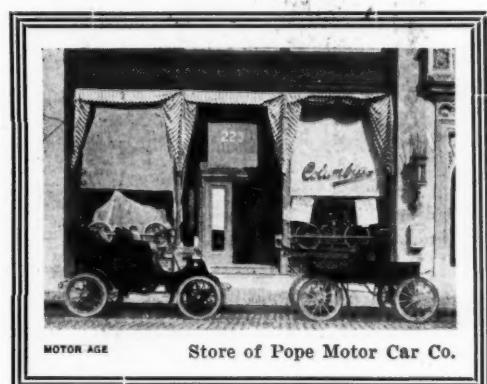
Russo Drisko, in the same building, handles the Reber and the American. The Videx Co. and the Rotary Motor Vehicle Co. are also located here.

THE PEERLESS BRANCH

On Columbus avenue, next door to the Cadet's armory, is the new branch of the Peerless Mo-



tor Car Co. This branch was opened the first of March by Mr. Morrison. Mr. Morrison has been ill with typhoid fever for several weeks, during which time the affairs of the company have been handled by Jack Snow. Mr. Morrison also handles the Baker electric.



A. J. Coburn & Co., 153 Columbus avenue, have developed a car which they will call the Commonwealth. The car is now almost ready for introduction. The firm also handles the Crestmobile and the Elmore. In the same store the Columbus Automobile Exchange handles the

Rambler, does a large business in buying and selling second-hand automobiles and making a specialty of repair work.

On Boylston street, near Arlington, C. I. Campbell, the representative of the Mobile, is the last man to stick to the street which was once the automobile street of Boston. He will remain there until his present lease expires, when he will endeavor to become a member of the present automobile district.

The Electric Vehicle Co. is now located in its new garage on Stanhope street, which was built exclusively for its use. This building is next door to Automobile Headquarters. It has a charging plant and a repair department which is capable of caring for steamers and gasoline cars as well as electric. Its system of storage and livery is one of the best devisable, and has appealed to hundreds of automobile users here.

DETROIT TRADE PROGRESS

Detroit, Mich., Sept. 14—The Detroit plant of the Olds Motor Works is now running entirely on foreign business, while the Lansing plant is taking care of the domestic trade.

Two automobile depots have been opened on Grand River avenue near the center of the city. The proprietors are P. Bingham and Pfeiffer & Young.

The prominence of Detroit in the manufacture of runabouts is given another boost by the introduction of the Queen car by the C. H. Blomstrom Motor Co., of this city. This company has engaged extensively in the manufacture of marine engines and launches and enters the automobile trade with a substantial road car of the moderate weight class.

Detroit is the first to announce a local automobile show for next winter, having formally stated that its show will be held February 15 to 20, inclusive, which is the week directly following the Chicago national show. It is expected that the show will be larger than that of last year, on account of the general growth of the industry and on account of the greatly increased activity in Detroit motor car manufacturing circles. The show space will be increased, as the galleries, which were last winter used for a bench show, will be decked over to afford room for the displays of makers and jobbers of sundries.



CAPITAL IS A LIVELY MOTOR CAR FIELD

Advantages for Automobiling at Washington Have Been Grasped so Fully That the Retail Trade Has Become Highly Prosperous—New Regulations Have Little Effect on Sales—Small Cars First in Favor

Washington, D. C., Sept. 14—Washington, "the city of magnificent distances," is destined to become a great field for automobiles, for the reason that it affords splendid advantages for the successful operation of cars and for the further reason that it is the abiding place of hundreds of wealthy people. The streets have a total length of 250 miles, 70 per cent of which are paved either with asphalt or macadam. They are wider than in any other city on the globe, the avenues ranging in width from 120 to 160 feet, while the streets range from 80 to 120 feet. The area comprised in the streets, avenues and public parks is considerably more than half the area of the city. In addition, there are suburban roads leading from the city in every direction, affording automobilists every opportunity to try their cars on the road.

It is little wonder that the sale of machines has reached large proportions. Three years ago there were less than 50 automobiles in the District of Columbia. Today it is conservatively estimated that there are 500, and the number is rapidly growing. While it was felt in some quarters that the new regulations, requiring, among other things, the registration and numbering of every automobile in use, would tend to keep down sales, the reconstructed opinion is that the regulations, when they are fully understood by the automobilists, will work for the good of the trade.

HARD TO FILL ORDERS

While more automobiles have been sold here during the past year than during the whole previous time since the inception of the business, the various dealers have been greatly handicapped by their inability to keep an adequate number of cars on their floors for display purposes, and by their inability to guarantee quick deliveries. Many sales have thus been lost, at least temporarily, but now that the output of so many factories is being increased, the dealers are looking forward to having their orders filled with some degree of promptness, enabling them, in turn, to promptly fill their own orders.

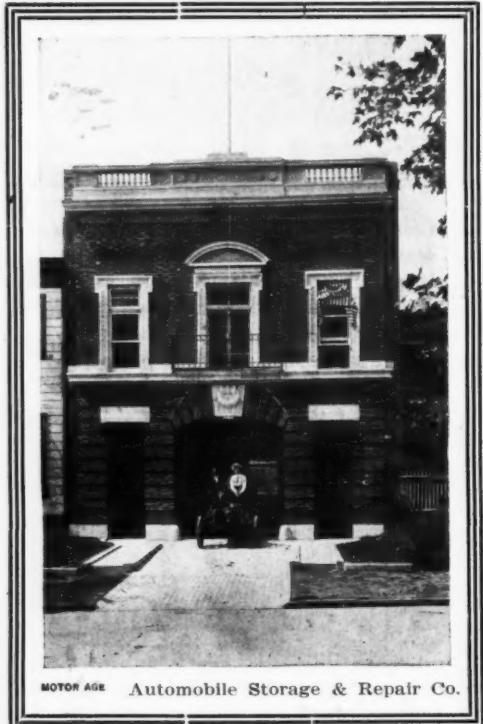
BIG CAR TRADE IMPROVING

A striking feature of the local trade has been the great demand for small cars, but a demand for the heavier machines is gradually looming up. The fact that a number of touring parties have used the big cars in trips around the country adjacent to Washington and have enjoyed eminent success with them, has awakened interest in the big cars and from now on they can be expected to have a good sale. It was a Washington business man in a four-cylinder Toledo touring car who was the first this year to ascend Mount Washington, and since his return the big car he used on that occasion has been greatly admired and at least two sales have been made on the strength of that performance.

Just now business is at a low ebb, but with the return of the fall season trade is expected to pick up with a rush. An extra session of congress, which seems to be on the tapis, will fill the capital city with moneyed people and will start the ball rolling for a lucrative business throughout the fall and winter.

Many improvements have been made in the local garages during the past few months and they will now compare favorably with those in the largest cities. A MOTOR AGE man recently went the rounds and interviewed the various dealers and managers. The net results are herewith presented:

The Washington branch of the American Cycle Mfg. Co., which is under the management of W. J. Foss, and which handles the Toledo, Waverley electric and Cadillac, has



MOTOR AGE Automobile Storage & Repair Co.

sold sixty machines to date. The sales on the Cadillac have been particularly heavy.

A representative line of machines is handled by Charles E. Miller & Bro., who are located at 1105 Fourteenth street. It includes the Searchmont, Darracq, Reading and Grout. Business has been good throughout the year and would have been better had the firm been enabled to get machines promptly. Two garages are maintained in Stanton court.

Business has increased to such proportions

with the U. S. Long Distance Automobile Co. that Manager Dorsett has been compelled to erect a building. Formerly the company was located at the corner of Seventeenth street and Pennsylvania avenue, but is now at the corner of Seventeenth and U streets, in a handsome one-story brick building 100 feet long and 60 feet wide. A fine storage and repair business has been developed.

For a little over 3 years the National Capital Automobile Co., incorporated, has been selling the Oldsmobile and more of them are seen on the streets of Washington than cars of any other make. The company also handles the Peerless and Packard, and has Maryland, Virginia and a portion of West Virginia for its field. Several salesmen are constantly traveling over this territory, with the result that the company's local business has been greatly augmented. A large garage is maintained in the rear of 1120 Eighteenth street.

The incorporation of a company to carry on the business of selling, renting and storing automobiles marks a phase in the development of this line of business in this city. The new company is known as the Willard Automobile Station, which was incorporated last week to take over the business of A. L. Kull & Co. It will handle the Cleveland, St. Louis and Pierce and maintain a garage at 400 Fourteenth street. A feature of the business will be the renting department, where machines can be rented by the hour or day. Twenty renting cars will be available by September 1.

The Washington Electric Vehicle Transportation Co. has a fine plant in the old Panorama building on Fifteenth street. More than \$12,000 has been expended in improving the plant within the past 3 months, and it is now one of the finest to be found south of New York. While the storing of vehicles is the principal business of the company, a salesroom for Columbia electrics is maintained. The charging station is the most complete in this section.

In many respects the garage of the Automobile Storage & Repair Co., on L street, is the finest in Washington, or in the entire south, for that matter. It is a substantial brick building two stories high, with a width of 30 feet and a depth of 165 feet. As the name of the company indicates, it only stores and repairs vehicles, although a complete line of parts and sundries is handled. Associated with the company is the firm of Cook & Owessney, which handles the Winton and Stevens-Duryea.

The Locomobile is handled by the Automobile Co. of Washington, which has a large storeroom and garage on Connecticut avenue.



Washington Store of American Cycle Mfg. Co.



THE READERS' CLEARING HOUSE

CRANK CHAMBER FLY WHEELS

Jackson, Mich.—Editor MOTOR AGE—Would it be practical to build a two-cycle motor with crank chamber fly wheels, similar to the high-speed four-cycle motors, or is it necessary to have the extra clearance in the crank-chamber for the mixture?—P. S.

Such motors have been built, but have not been successful on account of the tendency of the enclosed fly wheels to throw the lubricating oil into the inlet port leading to the cylinder along with the mixture, thereby defiling or deteriorating the cylinder charge. The clearance or space in the crank chamber is simply to clear the connecting rod bearing on the crank shaft and should be kept as small as is practical, so as to give as great a partial vacuum in the crank chamber as possible, in order to insure the admission of a larger charge or volume of mixture into the crank chamber.

MOTOR HORSEPOWER

Port Chester, N. Y.—Editor MOTOR AGE—Will you give me the horsepower of a four-cylinder gasoline motor, with cylinders of 3 1/4-inch bore and 4-inch stroke at 800 revolutions per minute?—C. S.

A four-cylinder motor of 3 1/4-inch bore and 4-inch stroke should develop about 12 horsepower at 800 revolutions per minute.

CONSTRUCTION OF RADIATOR

Reading, Pa.—Editor MOTOR AGE—How many lineal feet per horsepower, and what diameter of tubing should be used for a radiating coil for a gasoline automobile motor? Which is the better system to use, the header where the tubes are connected in parallel or the continuous tube style of radiator?—E. F.

About 5 lineal feet of tubing per horsepower is necessary to insure good cooling effects. Either 5/8 or 3/4-inch tubing may be used for the radiating coils. It is a matter of choice as to which system of radiator to use. The header system gives less friction on the water than the continuous radiator and presents a much neater appearance. The continuous tube radiator has, however, greater cooling properties.

RAISING IGNITION VOLTAGE

Pasadena, Cal.—Editor MOTOR AGE—What is necessary to increase the voltage of the ignition apparatus of a gasoline motor?—M. P. G.

If batteries are used, increasing the number of cells will increase the voltage. If the ignition is by a generator, the speed of the generator must be increased to increase the voltage. A large induction coil with a primary winding of very low resistance will produce the same effect, but is not economical in the use of current.

IGNITION OF THREE-CYLINDER MOTOR

Cleveland, O.—Editor MOTOR AGE—I wish to construct a device to ignite a three-cylinder motor, using only one coil and battery and with that end in view I have been studying the device illustrated in MOTOR AGE of January 22. Would not the secondary current find a

path from the point where the secondary wire is grounded on the primary wire, or through the motor and commutator back to the coil? Would a reliable spark be obtained if this were the case? As I understand this device is in successful operation, I would like some information on the subject.—CONSTANT READER.

In the device illustrated the cam which operates the secondary contact-maker is insulated from its shaft and the secondary current is completed by a connection between the commutator of the primary and the cam which completes the secondary circuit through the contact-maker.

CHASSIS AND TONNEAU

Columbus, O.—Editor MOTOR AGE—What is the exact meaning of the words chassis and tonneau as applied to automobiles?—J. B.

The exact meaning of each of these words is hardly the meaning which it has been commonly accorded. Both are French words—chassis literally translated means frame, and tonneau literally means barrel. Each has come to possess, however, a distinct meaning in automobile parlance. The chassis is taken to mean the complete automobile minus the body—in other words, the running gear with the power plant, etc., installed upon it. Tonneau is applied to rear seat structures in which the seats are enclosed or built up on the sides with the entrance through a rear door. The fact that the first patterns of tonneau were large and round in the back shows how this structure got its name, the shape resembling that of a barrel. The word is often misused to designate a pattern of car.

THE SELDEN PATENT

Columbus, O.—Editor MOTOR AGE—Please explain the points in which the ordinary gasoline automobile infringes the Selden patent.—A. J. J.

The claim in the Selden patent which is principally pertinent in the manufacture of gasoline automobiles is that, which, in liberal translation, provides the combination of a hydro-carbon motor with disconnecting means in the transmission elements between the motor and the road wheels. Broadly, this claim covers the use of the ordinary driving clutch in any of its forms. The strength of the patent lies in the fact that common forms of hydro-carbon motors must be free from driving relation with the vehicle to be started—hence the necessity for the use of a clutch or other disengaging means.

OILING PISTON WRIST PIN

Columbus, O.—Editor MOTOR AGE—I would like to know the best method of oiling the upper or wrist pin end of the connecting rod, in a vertical two-cycle motor. As the splash system of lubrication cannot be used, there would seem to be no means of getting oil to the wrist pin end of the connecting rod.—J. W. B.

The illustration shows a method of oiling the upper or wrist pin end of the connecting rod. The threaded base for the pressure right feed oiler, which is used to lubricate the cylinder and piston, should be so located that when the pis-

ton is at the end of its downward stroke the hole shown in the wrist pin will be in communication with the pressure sight feed oiler by means of the opening in the threaded base. A small hole is drilled in the wrist pin at right angles to the central hole to feed the oil to the wrist pin bearing. This method is in use on several makes of motors, and is said to give good results.

GROUND WIRE ON RUNNING GEAR

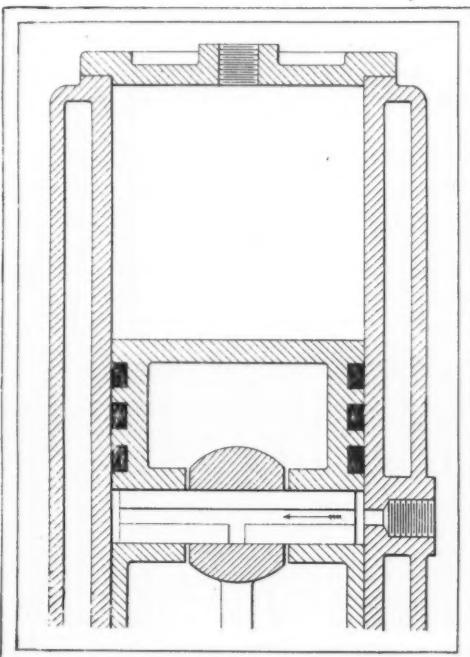
Sutton, Neb.—Editor MOTOR AGE—I have a gasoline runabout which has given me a good deal of trouble. I am continually getting shocks from the steering lever, switches or throttle whenever I have occasion to use them. What is the reason of this?—J. M. W.

There must be some place in the secondary wire which is connected to the spark plug that is either too close to the frame of the running gear, or else with its insulation worn through at some point, and allowing the wire to contact with the frame.

SPLASH LUBRICATION

New York, N. Y.—Editor MOTOR AGE—In MOTOR AGE of August 20 is a letter inquiring about the use of the splash system of lubrication for a two-cycle motor. The answer is to the effect that splash lubrication cannot be used successfully in a two-cycle motor. I have designed and built a number of gasoline motors, both two and four-cycle, and have never had any difficulty with the splash lubrication system. I have also tried a number of force oilers, the only results being the expenditure of extra money. You will find that the Lozier, Palmer, Sintz, Wolverine, Truscott, the Western and other builders of two-cycle motors, all use splash lubrication. I have tested one of the above motors and ran it steadily without a mis-fire for 24 hours.—G. R. N.

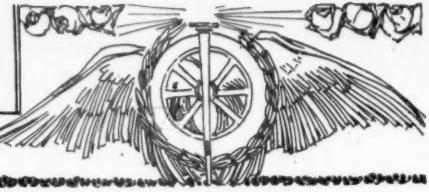
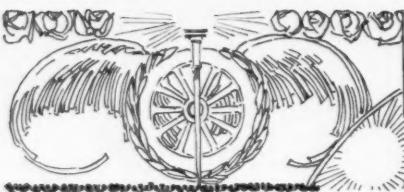
The splash system of lubrication mentioned in the article referred to had reference to the method of cylinder lubrication and not simply to lubricating the crank shaft and connecting rod bearings. The motors specified have in nearly every case sight feed lubricators for the cylinders, and some have compression grease cups for the crank shaft bearings as well. Splash lubrication as a general term refers to a motor which lubricates itself from the crank chamber without any outside oil or grease cups.



MOTOR AGE

Lubricating Wrist Pin

FOREIGN MOTOR AFFAIRS



BRITISH TEST HAS 140 ENTRANTS

Makers Much Interested in English Reliability Trials Starting Friday—Four American Cars Represented

Manufacturers have shown great interest in the reliability trials under the auspices of the Automobile Club of Great Britain and Ireland, which will be held September 18 to 26 over selected routes in the south of England, the start being made daily from the Crystal Palace, and there are now 140 entries.

In addition to the running trials over the roads there will be hill-climbing and brake tests, while there will also be an allotment of marks for absence of noise and dust raising.

The start will be made at 7:30 a. m. each day. No one will be admitted to the storage tent during trials except the observers, drivers and officials. The information given to the press each day will be marked "provisional and liable to alteration," and no marks will be issued. The observers' remarks will not be published.

The timing of cars on the hills will be performed by a timekeeper stationed at the top and another at the bottom, who will take the time of each car as it passes.

Of the 140 entries there are three in the class for tandems, quadri-cycles and similar 2-passenger vehicles weighing over 170 pounds and costing \$800 or less. In vehicles declared at a selling price of \$1,000 or less there are twenty entries. In the class for cars costing more than \$1,000 and not over \$1,500 there are seventeen entries. In the class for cars of not more than \$2,000 nor less than \$1,500 there are twenty-four entries. There are twenty-nine entries in the class for cars of not more than \$2,750 nor less than \$2,000. The entries in the class ranging from \$2,750 to \$3,500 numbers twenty-five, and in cars of from \$3,500 to \$4,500 there are sixteen entries. There are only six entries in the class for cars costing over \$4,500.

The American cars entered in the trials by British representatives are the Cadillac, Oldsmobile, Winton and the White Steamer.

SEVEN FIRST-CLASS CERTIFICATES

The reliability trials under the auspices of the Auto-Cycle Club of Great Britain have resulted in the following awards:

First-class certificates to the Bat, Bradbury, Chase, Kerry, King, Ormonde and Werner; second-class certificates to Alldays & Onions, Booth, Bradbury, F. N., Griffon, J. A. P., Lagonda, Matchless, Peugeot, Phoenix, Robinson & Price and Werner; third-class certificates to the Ariel, Castell, Phoenix and Rex. Mr. A. Van Hooydonk was awarded a silver medal for the best performance in the private owners' class.

An Englishwoman who drives a motor almost exclusively has made it a point to be on the lookout for drivers who are cruel to their horses, and her activity in this direction has led to fourteen arrests this summer.



AT THREE MILES AN HOUR!

This Is the Frightful Gait at Which Belgians May Legally Drive Automobiles In Capital City

The owners of automobiles all over little Belgium are on the war path against the government and the local officials of some of the most important cities of the kingdom. The mayor of Brussels, with the assistance of his colleagues of the municipal council, issued a decree stipulating that in all of the important streets and boulevards, the maximum speed is to be 5 kilometers, or a trifle over 3 miles an hour. This law is keenly resented, and mass meetings have been held in the capital and a petition signed by owners and non-owners has been presented to the mayor, but he has not changed his decision.

The dealers complain bitterly, as some of the boulevards and avenues comprised in the list for the speed limit are the best and largest of the town, and the natural scarcity of automobiles on them will injure trade.

Several mayors of suburbs of Brussels have followed the example and established similar speed limits for their territories. The mayor of one suburb, who is a member of the Belgium Motor Club, has on the other hand issued an order permitting motor cars to travel at a speed of 15 kilometers or 9 1-3 miles through his territory.

No sooner had the Brussels mayor issued his order than the directing head of Antwerp, the second largest city in Belgium, issued a regulation limiting the speed in the principal thoroughfares to the same speed, with a provision that any infraction would render the offender liable to from 1 to 9 days' jailing and 20 cents to \$5 fine. The automobilists of the city have started a campaign against the regulation, claiming unfairness, on the ground that street cars travel 19 miles an hour on the same streets and boulevards. An Antwerp paper suggests that automobilists drive in front of the electric cars at the new speed of 3 miles and thus compel cars to go no faster. At a special meeting of the Antwerp Automobile Club, at which Baron de Caters presided, it was decided to send a committee to the city officials to try to have the speed regulation changed.

The committee succeeded in having the mayor annul the ordinance making the speed limit 3 miles an hour, and the rate was changed to 6 miles an hour.

SUBSTANCE OF BRITISH RULES

Outline of Important Provisions in Recently Enacted Motor Car Bill Which Has Aroused Much Feeling

After the first of next January the motorist in England will have to obey the following rules in order to comply with the new motor car law:

The car must not be driven recklessly or negligently or in a manner dangerous to the public. In deciding this point the magistrate must take into consideration all the circumstances of the case, the amount of traffic on the road being a prime consideration.

In case the car is driven by one who is not the owner, and who refuses to give his name and address, or gives it falsely, the owner must disclose his name and address, or he will be held liable for any damage done.

Every car must be registered. A refusal to do this is punishable by a fine of \$100 for the first offense and \$250 for each subsequent offense. The driver of a car must be licensed. The charge for this is \$1.25, and the license must be renewed yearly. A manufacturer or dealer may use a general identification mark by the payment of an annual fee of \$15.

The age limit for motor cycles is 14 years; for motor cars, 17 years.

The court may suspend a license if it sees fit after conviction of a first offense under the act, and may disqualify the offender from obtaining another license. The court cannot suspend a license for a simple offense against the speed limit, except on the third conviction.

The car must not be driven at a greater speed than 20 miles an hour. In places where conspicuous notices are posted the speed must not be over 10 miles an hour. If this regulation is broken it is punishable with a fine of \$50 for the first offense, \$100 for the second and \$250 for the third.

A tax of \$3.75 a year must be paid for the driver of the car.

TRANS-ATLANTIC MISCELLANY

Baron Henri de Rothschild, who was sentenced by a Paris magistrate to a day in jail and a fine of \$2 for exceeding the speed limit, has appealed and says he will carry the case to the highest court of France, if necessary, to get the decision reversed. He was arrested by a policeman, who claimed that he had to run after the baron and hang on to the mud-guard of one of the wheels to get him to stop the car. He also charged him with driving on the left side of the street. In court Rothschild's attorney claimed that in the first place the baron had a special pass given him by the chief of police, and that at the time of his arrest he was on the way to a patient—the baron is a physician—he was not driving faster than allowed by the regulations. After a long discussion of the case, the court went into the yard of the court house where the car was standing, and it was here demonstrated that it was impossible for the policeman to get a hold of the mud guard. The latter, who tried to repeat the alleged performance, made a

farce of the affair and was rebuked by the judge. As the baron had been sentenced once before to a day's imprisonment, which had been changed to a fine, the judge decided to impose both jailing and fine.

Madam Juliette Lockert, editor of *Le Chauffeur*, started September 6 from Paris on an automobile trip to St. Petersburg, in a 14-horse-power car. The distance is about 2,000 miles.

A new passenger and merchandise automobile system has been inaugurated between Saarlouis and Wadgassen, Germany. One omnibus seating twenty-five persons and a motor truck of 20 tons capacity will comprise the service.

Two Austrian motor cycle riders started August 20 on a 6,000-mile motor cycle trip around Europe. They will pass through Italy, Switzerland, Germany, France, Belgium, Holland, England, Denmark, Sweden, Norway and Russia and will endeavor to get back to their starting point in 38 days.

The Northern railway of France has made tests with a new steam automobile, for rails, on its track between Paris and Survilliers, where there is a grade of about 14 miles. Over the ascending course the speed attained was about 37 miles, while in the down grade it reached 46 miles.

Nearly 8,000 people witnessed the Maurice Fournier-Barnes-Sigonnaud motor cycle match in London last month. The Frenchman won the mile standing-start heat in 1:17 4-5 and the 3-mile flying-start heat in 3:21 3-5, but was defeated in the 5-mile heat by Sigonnaud by 25 yards, who rode the distance in 7:10 1-5 from a standing start.

During the first 6 months of 1903 the total Belgian exports of automobiles and accessories

ries reached \$692,422, as against \$601,724 during the same period in 1902. Cars alone figure for \$142,661 in this amount, as compared to \$119,740 last year. Two hundred and eighty-three motor cycles valued at \$39,941 were exported to France, Germany, England and Holland.

Tests were recently made by the postal authorities of Bielefeld, Germany, of motor mail collection. All mail boxes of the town—about fifty—were emptied by the use of one car in an hour and a quarter, while previously it took twenty collectors an hour and a half to do the same work. As a result an order for several postal automobiles was placed with the firm of Durkopp.

Hotchkiss, the famous gun-maker, has entered the automobile field. The first car, a 20-horsepower machine, turned out by his Saint Denis factory, was seen in the streets of Paris a fortnight ago. Automobile critics state that it is a marvel. It has novelties in construction, disposition of parts, simplification of parts, but just what all these marvels are nobody seems to know. It is a secret yet.

The king of Italy will follow this year's army maneuvers in his automobile and the queen will accompany him during the entire period. A large party of automobilists will follow the maneuvers and the Italian Touring Club has been asked to take care of them. A special fuel depot has been established at Treviso, where about 800 gallons of gasoline are kept in reserve.

At this year's German army maneuvers, each of the two opposing army corps will have four automobiles at its disposition. One special car will be reserved for the four commanding generals. All told, about a dozen

cars will be with the army. A 16-horse-power car will be reserved for Emperor William. Besides these "official" cars, there will be a large number of private cars loaned to officers. For instance, Mr. Willy Poegel's 60-horse-power car, which was so conspicuous at the Ostende meeting, will be used by the Royal Prince of Saxony.

The automobile for war purposes will be employed on a large scale during the annual maneuvers next month of the German army in Saxony. Twelve cars will be used, four each by the headquarters staffs of the two contending armies, and one each by the commanding officers of the four participating army corps. Six of these vehicles are the property of the war department and consist of four and six-seated Mercedes, Daimler, Benz and Duerkopp cars of 10, 12 and 16 horsepower. Emperor William will use one of the Mercedes cars.

Another automobile speedway is under consideration in France. A syndicate is planning to establish a 35-mile road around the Forest of Fontainebleau. The width will be about 15 yards and to make the road entirely independent of others it will be necessary to build forty-five bridges and a viaduct at Valvins, at a cost of \$60,000. Near Croix de Guise a number of grand stands may be erected capable of seating 30,000 people. Similar grand stands will also be put up near Barbizon, on another part of the road. On a suitable piece of ground a "palace of sports" will be built and a bicycle track, football grounds and spaces for other games arranged. The cost of the entire grounds is estimated at about \$1,200,000. The syndicate is willing to pay the state \$7,000 annually for the concession.

THE BRITISH AUTOMOBILE CLUB'S MODERN GARAGE

The Automobile Club of Great Britain and Ireland now has the most complete garage in London, according to the Automobile Club Journal. The garage, which is situated directly in the rear of the club house, has an area of 3,000 square feet, comprising three floors and a basement.

The basement has a storage room for about twenty cars and a washing place where three cars can be handled simultaneously. The boiler house is also situated here.

The ground floor accommodates about twenty cars. There is a weigh-bridge on this floor, where the weights of both front and back wheels can be taken separately. The attendant's office is located at the entrance, and the gasoline store is kept near by. A machine to test the actual horsepower of the driving wheels will probably be placed on this floor soon.

The first floor accommodates eighteen cars and is fitted with Bostwick gates, so that vehicles can be left under lock and key. This

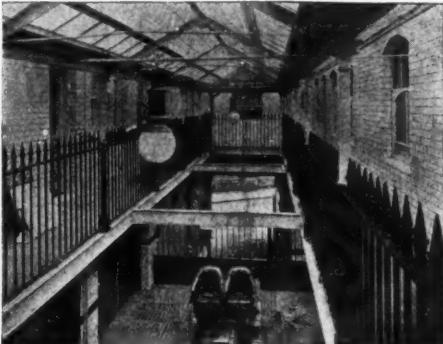
is for the use of members who desire to leave their cars in the garage for lengthy periods. The examination pit and vise bench is also on this floor, and light repair work may be done here by the drivers. Storage batteries may be charged here, and there are a number of large lockers for the storage of tools, spare covers, etc. A large hydraulic elevator connects the basement, ground and first floors. The Roads Improvement Association has one room on the first floor.

The second floor has four dressing rooms for the use of members, a mechanics' dressing room and mess room, and lavatory accommodations and offices for the staff. A large room on this floor has been rented to the Aero Club. The third floor consists of offices for the staff.

At present the garage is open from 7 a. m.

to 12:30 midnight, but arrangements are being made to keep it open the entire 24 hours of the day.

The charges for storing cars are as follows: For large cars, 60 cents a day, \$3 a week, \$10.80 a month and \$120 a year; for cars weighing under 900 pounds, 50 cents a day, \$2.40 a week, \$8.40 a month and \$90 a year. Bicycles are stored for 12 cents a day. Owners of cars placed in the garage by the year must sign an agreement, terminable at 3 months' notice on either side, and members residing at the club house three nights or more are allowed 10 per cent discount. Free use of the garage is permitted for the first 2 hours, and a charge of 12 cents for every subsequent 2 hours up to the maximum is imposed. Cars remain in the garage at the owner's risk, but arrangements are being made for the sale of insurance coupons, whereby at a small cost to the members this property is insured against any form of damage.



Interior Views of Garage of Automobile Club of Great Britain and Ireland

IN THE FIELD OF AUTOMOBILE DEVELOPMENT

"Throw your induction coil to the dogs" is the laconic advice given to automobilists by the Bullock-Beresford Mfg. Co., of Cleveland, as a starter in telling about the Bullock igniter which it is now introducing. The Bullock igniter is a low voltage, electro-magnetic device which is self contained, the magnetic influence upon which its operation depends being produced by wiring within its enclosing case. Briefly described, it is a simple sparkler which by means of a movable electrode produces a spark that might, in the words of the layman, be expressed as a cross between a jump spark and a make and break.

The movable electrode comprises a platinum pointed arm on the end of a rotary shank whose outer end is so connected to a movable piece that the vibration of the latter causes a similar and concomitant vibration of the electrode. This vibration being extremely rapid a stream of sparks, which are in effect one continuous flame, occur between the points of the movable and stationary electrode as long as the circuit remains closed. A positive spring system insures the return action of the vibrating parts, whose initial movement is, of course, produced by the electro-magnetic influence due to the passage of the low voltage current through the wiring. There are no parts whose bearings are liable to extensive wear, the mechanically operative elements all being light and without a great range of movement.

On account of the use of a low voltage current, supplied either by a battery or a dynamo, no high tension induction coil is necessary and the ignition system is thus made rid of one of its ordinarily most important parts. This not only reduces the parts liable to cause trouble, but simplifies the wiring. There is one wire from the igniter to the battery and one ground wire from the battery to the motor. A suitable commutator on the cam shaft of the motor is connected into any part of the circuit, as is also an ordinary switch for shutting off the current.

An important advantage of the low voltage at which the igniter operates is that it shows less tendency toward leakage of current over wet or dirty surfaces, or on account of oil and soot collecting on the sparking points. The company's demonstration of the truth of this reasoning is the graphic one of showing the

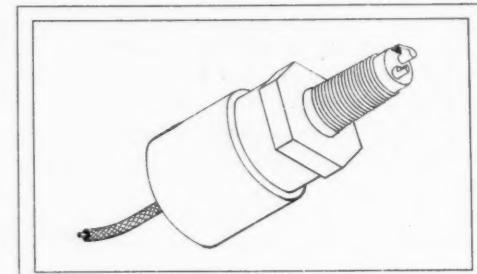
operation of the igniter with its points covered with oil, graphite, etc.

Economy of current usage is another advantage of the system, for according to figures presented by the maker, the Bullock igniter, when on a closed circuit consumes from $\frac{1}{4}$ to $\frac{1}{2}$ of an ampere and produces at this velocity of current from 75 to 150 electric flashes or sparks per second. With a suitable commutator, making a firing contact of one-tenth of a revolution, the rate of discharge of current is correspondingly reduced.

The igniter is furnished with any thread shank so that it may be applied to the engine just as an ordinary plug. Its manufacture has been arranged upon a plan which will allow immediate delivery in quantity.

MUELLER INDUCTION COILS

A vigorous campaign is now being made by the Induction Coil Co., of Milwaukee, Wis., manufacturer of the Mueller high tension induction coil, to introduce its product to the trade. The original Mueller coil came into prominence some years ago at the Chicago show, but since that time little has been accomplished so far as putting the coil on the



MOTOR AGE
The Bullock Igniter

market is concerned, because of the inability of the original makers to secure sufficient capital to make the goods in quantities.

This year, Louis Allis, late of the Allis-Chalmers Co., and W. W. Sherman, who is largely interested in Milwaukee real estate, took charge of the business and they are putting forth every effort to get the coils before the public. The facilities have been improved in every detail, and the company is now making a complete line of coils.

The standard coil is called No. 6, the same



MOTOR AGE
Mueller Dashboard Coil

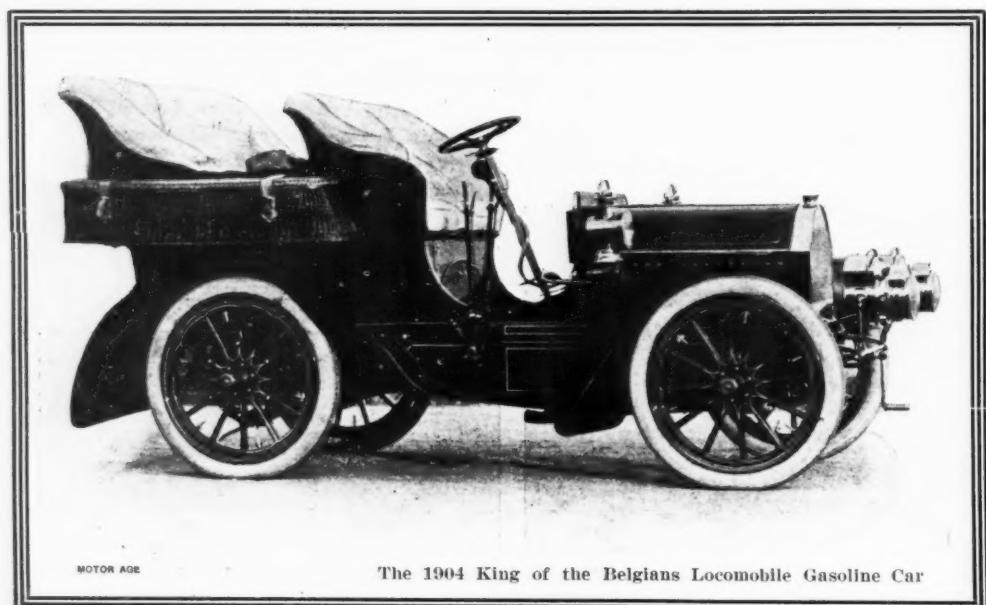
model being also made in styles 6A and 6B. The difference between these and the standard is that they have four terminals and are wound for greater economy in consumption of current than the other models. All of the coils sell at the same price.

The next coil of higher efficiency is the No. 4, which is made in two styles; the No. 4 is constructed with four binding posts and produce an extraordinarily long spark, while No. 4A produces a somewhat shorter spark, but on less consumption of current. The company claims that the 6B and 4A coils use but one-half the current which is necessary to operate the other models. These differences are made in order that purchasers may choose the class of coil best adapted to their purposes. The dash coils are made up in single, double and quadruple patterns to suit different types of cars. The cases are oak, fitted with hard rubber decks.

The company offers to send to any responsible dealer whose rating is acceptable, any type of coil on 10 days' trial, and if it does not do the work satisfactorily it may be returned. The coil must be wired according to instructions, and the proper number of batteries used. Expressage both ways must be paid by the company sending the order. The same offer is made to companies not satisfactorily rated, and to individuals, except that the price of the coil must accompany the order, the money to be returned if the coil fails to do satisfactory work and is returned in as good condition as when it left the factory.

CHAIN CASES AND STORM APRONS

The moving of the Automobile Equipment Co. from Indianapolis, Ind., to Detroit, Mich., included the provision of more extensive manufacturing facilities. The company is now located at 251 Jefferson avenue, Detroit, where it occupies a well fitted store room and with manufacturing space above. The direct management of the house is in the hands of P. E. Hawley. Messrs. Chapin and Fisher, both extensively known in the motor car trade, are the other members of the company. To protect the automobilist from the elements is the chief object of the company, its leading articles being waterproof coverings. These include chain boots and engine casings for Oldsmobiles, and rain aprons for runabouts and heavier cars. The chain boot and engine casing entirely encase the motor and driving chain and



MOTOR AGE
The 1904 King of the Belgians Locomobile Gasoline Car

excludes mud, rain and dirt from these parts. The rain aprons are made of silk-rubber and entirely protect the passengers from rain with the exception of their faces. The company also has front curtains with celluloid windows for use in connection with regular top hoods, and a line of touring and physicians' cases ready for attachment to cars of standard patterns. Other articles in the line are initial hangers, compasses, pocket ammeters, spark plugs, grommets and engine lubricant.

NEUSTADT-PERRY BONNETS

The motor bonnet shown in the illustration is that recently introduced by the Neustadt-Perry Co., of St. Louis, Mo. The chief characteristic of the construction of this bonnet lies in the use of rod or beaded joints between the brass corner strips and the body sections. This beading process avoids the use of solder in these joints. A quarter-inch bead or brass molding is also used around the door and for the bottom band of the hood, and, if ordered, a small bead will be supplied on the door slats to heighten the effect. This bonnet is but one of the several new structural parts which have been added recently to the Neustadt-Perry line of bodies, running gears, etc. The third catalogue issued by the company this season presents many new patterns of the specialties manufactured by the company, as well as showing the line of standard parts and fittings for which the company acts as selling agent.

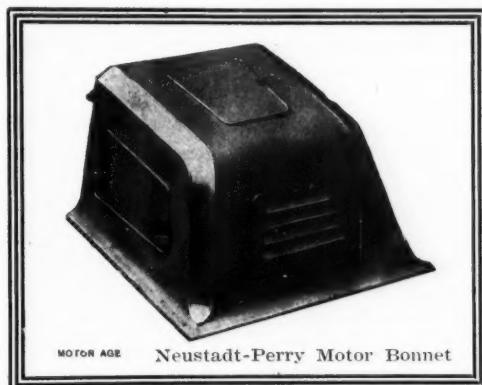
DRIVING CLUTCH COMPENSATING DEVICE

When the power of a gasoline motor is transmitted from the motor to the speed transmission by means of a cone friction clutch located on or forming part of the fly wheel, difficulty is sometimes encountered in preserving the alignment between the motor and the transmission gear, on account of the warping or distortion of the frame of the car, due to inequalities of the road. To overcome this

trouble numerous devices have been devised to form a means of more rigid or flexible drive between the motor and transmission gear.

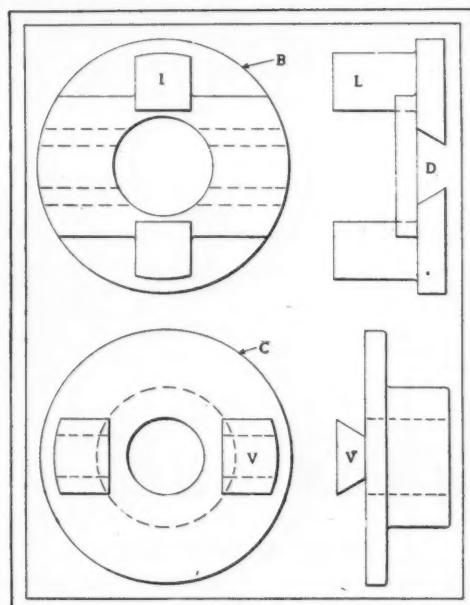
In the form of drive illustrated in Fig. 1 the male portion of the cone friction clutch is normally held in contact with the fly wheel or female portion of the clutch by a coil spring with ball-bearing cup and cone and is withdrawn by means of a yoke working in a grooved collar. The hub F of the male portion of the cone friction clutch slides upon the hub H of the fly wheel and also has a bearing upon the extension E of the crank shaft M. The fly wheel is secured upon the shouldered portion of the cam shaft M by means of the lock nut N. The cone R has a threaded end which screws into the extension E and is prevented from turning by means of a pin which passes through both the extension E and the threaded end of the cone R.

The flange at the right hand end of the groove G has four lugs, A, which engage the lugs L upon the part B. The part B has upon the face opposite the lugs L, a doubled groove D, which fits over the lugs V, upon the part C.



MOTOR AGE Neustadt-Perry Motor Bonnet

The lugs L are free to slide in the grooves S, at right angles to the axis of the shaft M, as are the lugs V in the dovetailed groove D. The lugs A and L are of sufficient length



MOTOR AGE Clutch Compensating Device—Fig. 2

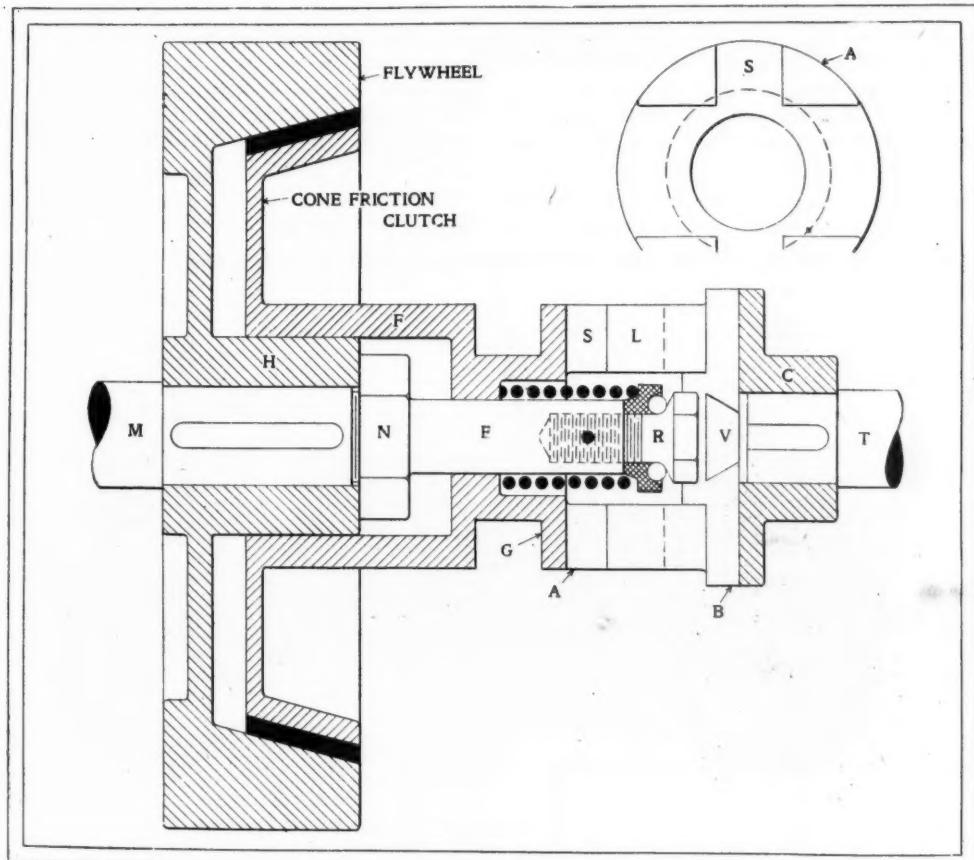
to allow the male part of the cone clutch to be engaged or disengaged with the fly wheel or female part of the clutch and yet be sufficiently in mesh to properly drive the speed transmission shaft T.

As the movement of the lugs L in the grooves S is at right angles to the movement of the lugs V in the dovetailed groove D, any disalignment of the crank shaft M with the speed transmission shaft T is compensated and the crank shaft M and the speed transmission shaft T may be thrown considerably out alignment in parallel planes without inducing any strain or binding of the driving mechanism or wear upon the bearings.

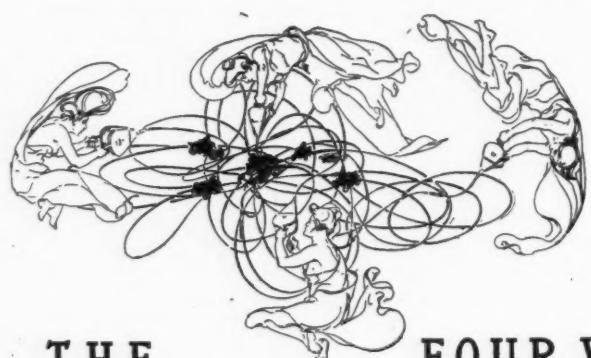
The lugs A, which form the groove S, are shown plainly in the upper right hand view, while the part B is shown in the two upper views in Fig. 2. The flange or hub which carries the lugs V is shown in the two lower views in Fig. 2. In cars equipped with motors located in front under a hood or bonnet and with a sliding or clutch gear form of transmission and either propeller shaft or side chain drive, the use of such devices eliminate all strain upon the machinery due to the distortion of the running gear from road inequalities and also gives an absolutely flexible form of drive. They not only increase the efficiency of the power transmission between the motor and road wheel, but lengthen the life of the clutch and transmission gear by eliminating all torsional- or twisting strains due to inequalities in the alignment.

The ordinary universal joint may also be used as a compensating device, by a slight change in the construction. Instead of making the eyes a fit in the jaws, they are made about one-fourth of an inch shorter than the width of the jaw, thus being free to slide upon their pins at right angles to each other and produce a similar movement to the compensator illustrated. This construction, however, is only applicable when room or length is not an object, as it cannot surround the spring which keeps the clutch in engagement as in the device illustrated.

The question has been raised in England as to whether or not an agent is entitled to a commission when he secures a customer and places the order with the manufacturer, and then the latter fails to deliver the car. It is claimed that the agent has performed his part of the contract and the manufacturer should pay the commission.



MOTOR AGE Clutch Compensating Device—Fig. 1



FROM THE FOUR WINDS

MELANGE OF MOTOR NOTES

President Shattuck, of the A. C. A., has returned from Europe. Mr. Shattuck wound up his stay abroad with a tour of 3,500 miles in the south of France.

The Chicago Automobile Club will go to Grand Rapids, Mich., Friday, September 18, where it will be entertained by the Grand Rapids club until Sunday night.

There has been a change in the composition of the Cadillac Co. of New York. W. C. Martin has retired and Horace B. Day, of New York, has taken his place. Col. John Jacob Astor and Clyde Fitch were among this week's buyers of Cadillacs.

The Kansas City, Mo., Automobile Club will hold an inter-state meet in that city on October 8. The committee on arrangements consists of D. F. Piazzek, E. P. Moriarty, Louis Curtis, Ray Sanborn, William Huttig, H. C. Merrill, Ned Halliwell and Lloyd Weber.

After a number of experiments in Paris made last year in carrying letters between the different post offices and stations, it has been decided that the electric carriage is the most practical for such service. In a few weeks twenty new electric postal wagons will be in use.

During the visit of Sir Thomas Lipton to Chicago this week the vehicles of the Electric Vehicle Co. have been impressed into service and the cup challenger was shown the scenery in the parks from the tonneau of the Columbia gasoline car which won the race at Milwaukee last week.

England this year has imported nearly \$6,200,000 worth of motor cars, which is more than double the amount imported during the corresponding 7 months of 1902. About 4,000 cars have been taken into the country since January 1. The exports for the same period amount to only \$600,000.

The motorists of Akron, O., have at last awokened, and are going to organize an automobile club. A preliminary meeting was held last week, attended by thirty motorists, and another meeting called for this week, when a permanent organization will be formed. There are about sixty-five automobile owners in Akron.

The Auto Supply Co., whose factory is on Mott avenue, Mott Haven, N. Y., has established a salesroom at the northeast corner of Fiftieth street and Seventh avenue, New York, for the convenience of visiting and local tradesmen seeking the company's parts, which enter into the construction of quite a few of the American automobiles.

grade. The jar of the motor finally started the wheels and down over the lawn went the car, missing trees and shrubbery, its owner about 50 feet behind, running as fast as his legs could carry him. The machine jumped over the wall at the edge of the roadway, then slid along the road by the Long Island sound shore as though the jar had connected the motor with the wheels. A stone in the road shaped its course toward the bath houses; then it turned suddenly and plunged over the sea wall into the sound. The tide was just past high at that time and the automobile disappeared from view for several hours. When the water receded the car was found nearly a hundred feet from shore.

PARK HAD NO SPEED LIMIT

Last Friday morning while Manager Jones, of the Chicago branch of the Electric Vehicle Co., was sitting at his desk busily thinking, a policeman walked in and going up to Jones tapped him on the right shoulder with the index finger of his left hand, saying briefly:

"You're pinched."

"What! Where? How much?" exclaimed Jones, obviously much disturbed at being thus abruptly addressed.

"It's a straight deal an' deres no use for ye to make a holler. Come on, now, and tell your troubles to de judge."

Jones went, taking the officer in the best electric brougham in the house, and the court room was reached in less than an hour.

"What's the charge?" asked Judge Mahoney.

"Exceeding the speed limit in Lincoln park last Saturday," replied the accusing officer.

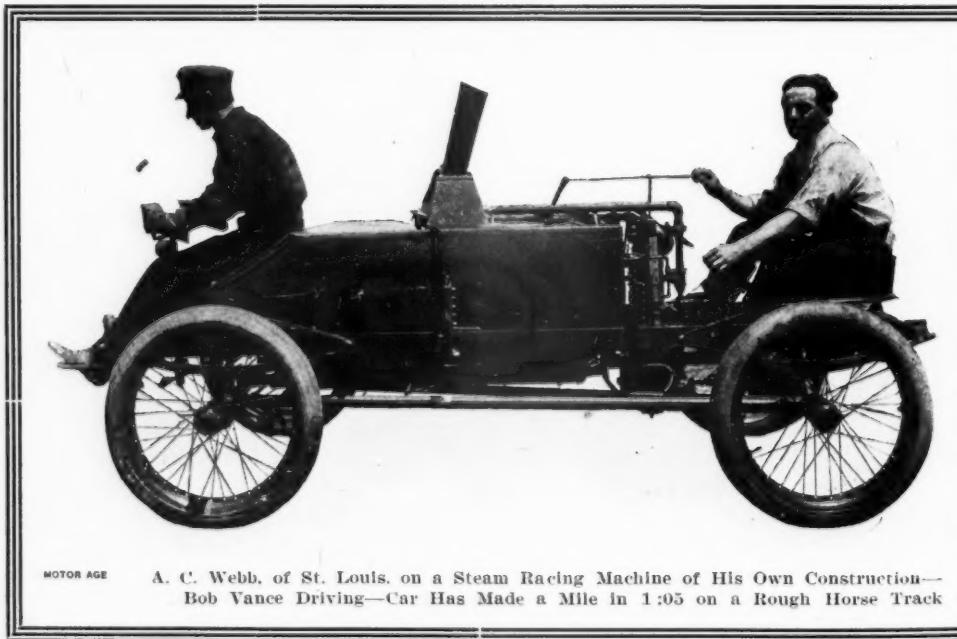
"Has the defense got anything to say for itself?"

"I was in Michigan last Saturday, and it was evidently some other man driving my car!" said Jones.

"What is the speed limit, anyway?" asked the judge, turning to the officer.

The officer was not positive, so a search of the ordinances was made. It was discovered that there was no park ordinance regulating the speed of automobiles, except the general one applying to bicycles and horses, passed several years ago before automobiles were in use.

"You're discharged, but don't you ever do it again," said the judge.



MOTOR AGE

A. C. Webb, of St. Louis, on a Steam Racing Machine of His Own Construction—Bob Vance Driving—Car Has Made a Mile in 1:05 on a Rough Horse Track

AMERICAN MOTOR LEAGUE OFFICIAL BULLETIN

OFFICERS

ISAAC B. POTTER, Pres., Potter Bldg., New York.
CHAS. E. DURYEA, 1st Vice-Pres., Reading, Pa.

W. GRANT MURRAY, 2d Vice-Pres., Adrian, Mich.
S. W. MERRIHEW, 3d Vice-Pres., 154 Nassau St., New York.

ROBERT L. STILLSON, Sec'y, 150 Nassau St., New York.
FREDERICK B. HILL, Treas., 32 Binford St., Boston.

NATIONAL HEADQUARTERS, 150 NASSAU STREET, NEW YORK

LEGISLATION

Geo. R. Bidwell	New York
Frederick B. Hill	Boston
E. B. Olmsted	Buffalo
P. L. Hussey	Toledo
W. Grant Murray	Adrian, Mich.
John A. Bechtel	Milwaukee
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R. E. Olds	Lansing
Harold M. Brown	Boston
Harry Unwin	New York
George E. Hannan	Denver
W. H. Kirkpatrick	Hartford

LOCAL ORGANIZATION

Charles F. Potter	Denver
H. W. Chapin	Syracuse
Edwin F. Brown	Chicago
Henry F. Spaulding	Buffalo
S. W. Merrilieu	New York
Charles B. Shanks	Cleveland

STATE DIVISIONS

Steps are being taken to complete the foundation of state divisions in the states of Massachusetts, Pennsylvania, Connecticut, Rhode Island, New York, Maryland, Illinois, Indiana, Michigan, Minnesota, Colorado and California, and the names of chief consuls for such divisions will be soon announced in these columns. The formation of other state divisions will shortly follow.

LOCAL CONSULS

The president announces the appointment of local consuls as follows, the certificate issued to each consul to bear the number set opposite his name:

- 1—Thomas T. Eckert, Jr., New York.
- 2—James G. Blaine, Pratt, Kan.
- 3—John A. Bechtel, Cincinnati, O.
- 4—Frank X. Mudd, Chicago.
- 5—M. M. Belding, Jr., New York.
- 6—J. F. Cass, Sumner, Ia.
- 7—John G. Xander, Reading, Pa.
- 8—Henry E. Matthews, Orange, N. J.
- 9—Harry Unwin, New York.
- 10—Noble W. Harison, Ogdensburg, N. Y.
- 11—Henry Chandler, Baltimore, Md.
- 12—James G. Budd, Glens Falls, N. Y.
- 13—Jules E. Serre, New York.
- 14—A. L. Riker, Bridgeport, Conn.
- 15—E. Ralph Estep, Chicago.
- 16—W. K. Cowan, Los Angeles, Cal.
- 17—S. W. Elston, Indianapolis, Ind.
- 18—A. L. Dyke, St. Louis, Mo.
- 19—E. W. Roberts, Clyde, O.
- 20—W. M. Perrett, Detroit, Mich.
- 21—E. M. Newell, Huntingdon, Pa.
- 22—Alonzo Sedgwick, Poughkeepsie, N. Y.
- 23—Fred B. King, Bridgeport, Conn.
- 24—Delmar A. Budd, Glens Falls, N. Y.
- 25—Henry L. Wood, Lynn, Mass.
- 26—G. Carleton Brown, Elizabeth, N. J.
- 27—Louis R. Smith, New York.
- 28—Charles F. Potter, Denver, Col.
- 29—Asmus D. Evertsen, New York.
- 30—John B. Price, Hazleton, Pa.
- 31—Francis N. Bain, Newburgh, N. Y.
- 32—Charles D. Cook, Paterson, N. J.
- 33—A. E. Carlton, Cripple Creek, Col.
- 34—Edwin F. Brown, Chicago.
- 35—W. H. Kirkpatrick, Hartford, Conn.
- 36—Frederick B. Hill, Boston, Mass.
- 37—G. W. Poley, Norristown, Pa.
- 38—W. H. Owen, Brooklyn.
- 39—Windsor T. White, Cleveland, O.
- 40—Burton Clay Wilson, Coplay, Pa.
- 41—J. T. Hemstreet, Herkimer, N. Y.
- 42—Ernst J. Berg, Schenectady, N. Y.
- 43—J. C. Brandes, New York.
- 44—Nelson H. Kilmer, Ocean Grove, N. J.
- 45—Henry Van Arsdale, New York.
- 46—Thomas D. Loeser, Elizabeth, N. J.

NATIONAL COMMITTEES

TECHNICS

Chas. E. Duryea	Reading, Pa.
Charles T. Jeffrey	Kenosha, Wis.
Ernst J. Berg	Schenectady, N. Y.
Alexander Winton	Cleveland
A. L. Riker	Short Hills, N. J.
Elmer Apperson	Kokomo, Ind.
Clark Sintz	Grand Rapids, Mich.
Julius W. Walters	Jersey City

RACING

A. G. Batchelder	New York
Albert Mott	Baltimore
Geo. G. Greenburg	Chicago
Chas. W. Mears	Cleveland
J. C. Kerrison	Boston
John N. Sharp	Salt Lake City
C. W. Carpenter	San Francisco

THE AMERICAN MOTOR LEAGUE

is an organization to promote the interests of all users of motor vehicles; to ascertain, protect and defend their rights; to oppose and prevent the enactment of unreasonable and oppressive laws; to encourage the use of motor vehicles by agitation and instruction; to provide its members with printed routes, maps and guide books by which touring may be facilitated and encouraged; to promote the work of improving the public roads and the erection of proper guide boards, and other signs, necessary to guide and warn the users of motor vehicles; to select and appoint official hotels, repair shops and supply stations where its members may obtain reliable service at reasonable rates.

WHO MAY BECOME A MEMBER

"Any man or woman, 18 years of age or over, of good moral character and respectable standing, friendly to the motor vehicle and its interests, shall be eligible to membership."

(Constitution, Article 2, Section 1.)

The League is extending its membership in all parts of the country. We invite all friends of the movement to join and aid in building up a powerful organization.

NO INITIATION FEE. ANNUAL DUES \$2 IN ADVANCE, OR \$3, INCLUDING 1 YEAR'S SUBSCRIPTION TO MOTOR AGE.

- 47—Henry A. Bang, Saratoga Springs, N. Y.
- 48—Julius W. Walters, Jersey City, N. J.
- 49—Joseph J. Mandery, Rochester, N. Y.
- 50—J. Grant Cramer, New York.
- 51—George Peck, Elizabeth, N. J.
- 52—W. J. Morgan, Newark, N. J.
- 53—David L. Whitford, Seattle, Wash.
- 54—A. L. Bunker, Pittsburgh, Pa.
- 55—C. R. Zacharias, Asbury Park, N. J.
- 56—Robert J. Kahn, Spuyten Duyvil, N. Y.
- 57—E. R. Coffin, Schenectady, N. Y.
- 58—W. L. Southworth, Lowell, Mass.
- 59—E. R. De Yoe, Wellington, Kan.
- 60—J. C. Westrick, St. Clair, Mich.
- 61—W. P. Kidder, Boston.
- 62—Charles T. Jeffrey, Kenosha, Wis.
- 63—George N. Pierce, Buffalo, N. Y.
- 64—S. W. Brown, Winona, Minn.
- 65—James Artman, Philadelphia, Pa.
- 66—N. L. Jackson, Belvidere, Ill.
- 67—C. W. Lanpher, Norwich, N. Y.
- 68—B. C. Hallman, St. Paul, Minn.
- 69—F. W. Chandler, Lowell, Mass.
- 70—C. E. Bown, Youngstown, O.

Other appointments are "slated" and will be announced from week to week. A consul's certificate dated in the year 1903 will be a valued souvenir in future years. It will remind its holder of the pioneer days of the

If you are not a member of the American Motor League, send your name and address to R. L. Stillson, Secretary, 150 Nassau street, New York, and obtain printed information.

MEMBERSHIP

Frank A. Egan	New York
John Wilkinson	Syracuse
W. K. Cowan	Los Angeles, Cal.
John M. Clark	Columbus, O.
S. E. Gifford	Chicago

SIGN BOARDS

John B. Price	Hazleton, Pa.
Edw. W. Barnes	Perth Amboy, N. J.
E. W. Roberts	Clyde, Ohio
W. J. Morgan	Newark, N. J.
B. G. Campbell	Milwaukee
G. W. Poley	Norristown, Pa.

PRESS

Jos. Estoclet	Philadelphia
John C. Wetmore	New York
John J. Donovan	Boston
Louis R. Smith	New York
Arthur N. Jervis	New York
C. G. Sinsabough	Chicago
W. Horace Lerch	Buffalo

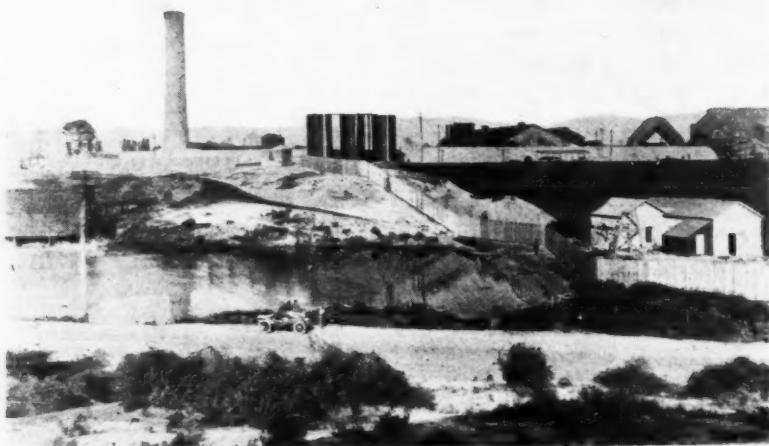
motor car and of the part he took in the fight to establish its place among the great improvements of the century. The league is entitled to the co-operation of every member in building up the organization. Its officers ask that co-operation from the members. The first hundred consuls have not yet been appointed. Members wishing a place on the list should write to the secretary.

CAUTION SIGNS

In another part of MOTOR AGE of this issue the new caution signs adopted by the league are illustrated and their method of utilization described. Accidents are happening every week which might be avoided were these signs in general use. They are simple and clear, and each carries a symbol so significant as to tell its own story. There are many things to be done in behalf of the automobilist in this country, but nothing of more imperative, nor of more lasting importance, than the work of putting up guide boards and caution signs in the thousands of places where they are needed. But this is only one of the things that the A. M. L. has determined to do, and to do many things at once the league is trying to double its number of workers. It needs 5,000 new members and is getting them, but they come faster—and at much less cost of time and money—when our members co-operate. Members who are willing to lend a hand should write to the secretary.

The Ladies' Automobile Club of Great Britain and Ireland has secured a large drawing room on the ground floor of the Hans-Crescent hotel, London, S. W., for a period of 6 months from October 1, and will make that place the headquarters of the body. The room will be reserved for the sole use of members and will be fitted up as a reading and writing room. The committee in charge will endeavor to arrange for a series of lectures by experts on automobiling.

The Paris automobile show promises to eclipse all previous exhibitions. Although the space allotments have hardly begun, General Manager Rives states that almost half of the entire space has been engaged. It is said that a large space has been taken for a joint exhibit by several prominent American manufacturers.



THE PAC TRANS-CONTIN

Having given the replacements upon the Motor, Carbureter and Electrical apparatus, we will now take up

The Transmission of Old Pacific.

This consists of a heavy flywheel, a spring drive, a friction clutch, sliding gears, a small and a large sprocket and a single chain.

Of course there was no replacement on either the flywheel or the spring drive, yet these two units bear a very large part in producing the smooth easy running of the Model "F." The work upon the sliding gears and friction clutch was something enormous. Mr. Krarup estimates that through Southeastern Utah, in crossing the innumerable "washes," in descending the bed of dry rivers and following their course in search of a convenient place on the opposite side for the ascent, in the backing and filling for the final charge at the almost precipitous wall, that the clutch and gears were operated 2,000 times in a single day's run, and yet, despite this frightful ordeal, there was absolutely no replacement upon either part, and in all only five adjustments of the clutch in the 4,068 miles from San Francisco to New York.

The gears upon all Packard cars are hardened, and those upon Old Pacific gave as the only evidence of use a polished surface upon every tooth. There was no perceptible burring where the edge of the teeth engage but only a bright surface.

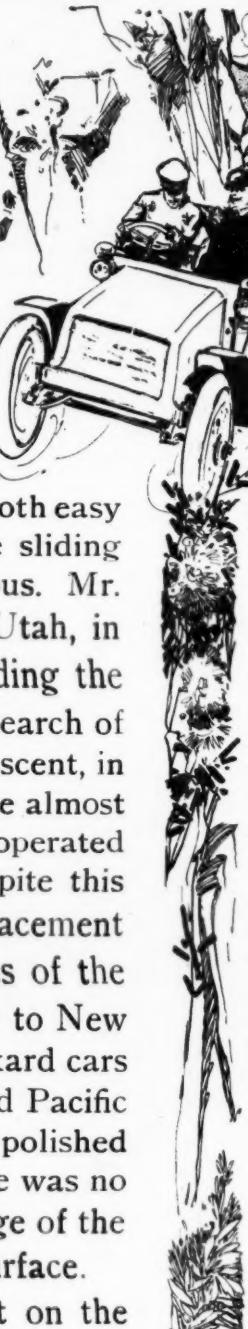
The standard driving sprocket on the

"ASK THE MAN WHO KNOWS."

PACKARD MOTOR

MEMBERS ASSOCIATION LICENSED AUTOMOBILE DEALERS

WARREN, OHIO



PACKARD CONTINENTAL TRIP.

Model "F" has 10 teeth, but for the steep ascents of the Sierras and Rocky Mountains a forward sprocket with one less tooth was used. At Denver this was replaced by the standard equipment, a 10-tooth sprocket. A careful examination at this time showed slight wear in the transmission shaft bushings, and though not necessary, new ones were slipped into place at the same time that the sprocket was changed. Near Carlin, Nevada, an obstruction in the center of the trail broke the chain (Baldwin) and four new links were needed for repairs. At Denver a new chain was put on, and at Batavia, N. Y., one "outer link" had to be replaced on account of picking up a stone in the road. At Sterling, Colo., a small lug on the gear box was found broken and replaced.

The total replacements on the transmission consist of

- 4 Bushings.**
- 1 Baldwin Chain.**
- 5 Baldwin Repair Links.**
- 1 Gear Box Lug.**
- 1 Sprocket (not on account of wear.)**

It must be remembered that the conditions of travel which made these replacements necessary defy all description and that a conservative estimate places the equivalent mileage in ordinary touring at 10,000 miles for the fearful obstacles encountered and overcome in the distance west of Denver.

The Packard is noted the country over for its endurance and unfailing reliability.

WHO OWNS ONE"

PACKARD CAR COMPANY

AUTOMOBILE MANUFACTURERS

OHIO, U. S. A.



Locomobile

Easily the Best Built Car in America

9 h. p. and 16 h. p. Gasoline Touring Cars.

Front Vertical Motors only used.



A 4-CYLINDER LOCOMOBILE.

POWER. Over one brake horse power for every 100 pounds of weight. This means great speed both on roads and on hills. Silent running and vibrationless.

EASE OF CONTROL. Multiple cylinder system with throttle on wheel gives perfect control. All speeds from six miles per hour to the maximum, obtained by throttle running on high gear. "It runs like a little sewing machine."

APPEARANCE. Very handsome and stylish. All kinds of tonneaus kept on hand ready for quick finishing. Both of wood and aluminum.

CONVENIENCE. All mechanical features in accordance with the best and latest practice. All parts easily "get-at-able." All valves removable and replaceable in minimum time. The working machinery being in front, passengers need never be disturbed to make any slight adjustments.

Write to any branch office for photographs, further details, or to arrange for a demonstration. You can not appreciate the many points of superiority of the Locomobile Gasoline Touring Car until you give it a thorough trial.

Order now, so as to get your car in time for the fall touring season.

The Locomobile Company of America

MEMBERS OF THE ASSOCIATION OF LICENSED AUTOMOBILE MANUFACTURERS.

NEW YORK: Broadway, corner of 76th St.
BRIDGEPORT: Factory at Seaside Park.
BOSTON: 15 Berkeley St.

LONDON: 39 Sussex Pl., South Kensington.
CHICAGO: 1354 Michigan Ave.
PHILADELPHIA: 249 N. Broad St.

In Racing as in Touring

THE DARRACQ CARS

“Run Rings Around Them All”

AND REPRESENT THE HIGHEST TYPE OF AUTOMOBILE PERFECTION

Empire City Track

July 25, 1903

5 MILE RACE

DARRACQ	-	1st
DECAUVILLE	-	2nd
DARRACQ	-	3rd

New World's Record for the distance. Time, 5.29

Cleveland

Sept. 5, 1903

10 MILE HANDICAP

DARRACQ	-	1st
WHITE	-	2nd
OLDFIELD	-	3rd

Time, 11.52 2-5

Detroit

Sept. 8, 1903

15 MILE SPECIAL

DARRACQ	-	1st
DECAUVILLE	-	2nd

Time, 16 min. 3 sec.
New World's Record
Best mile, 1 min. 2 2-5 sec.

Syracuse

Sept. 12, 1903

10 MILE RACE

DARRACQ	-	1st
DARRACQ	-	2nd

Time, 10 min. 36 2-5 sec.
Also record fastest mile, 1.04 3-5

AMERICAN DARRACQ AUTOMOBILE COMPANY

Controlled by F. A. LA ROCHE CO.

652-664 Hudson St. and 147 W. 38th St., NEW YORK CITY

CHICAGO: 502-504 Wabash Avenue
PHILADELPHIA: 262 North Broad Street
PITTSBURG: 3994 Forbes Street

NOTICE

TO MANUFACTURERS, DEALERS, IMPORTERS,
AGENTS AND USERS OF

Gasoline Automobiles

United States Letters Patent No. **549,160**, granted to George B. Selden, November 5, 1895, controls broadly all gasoline automobiles which are accepted as commercially practical. Licenses under this patent have been secured from the owners by the following named manufacturers and importers:

Electric Vehicle Co.	Pope Motor Car Co.
The Winton Motor Carriage Co.	The J. Stevens Arms & Tool Co.
Packard Motor Car Co.	H. H. Franklin Mfg. Co.
Olds Motor Works	Charron, Girardot & Voigt Co. of America (Smith & Mabley)
Knox Automobile Co.	The Commercial Motor Co.
The Haynes-Apperson Co.	Berg Automobile Co.
The Autocar Co.	Cadillac Automobile Co.
The George N. Pierce Co.	Northern Mfg. Co.
Apperson Bros. Automobile Co.	Pope-Robinson Co.
Searchmont Automobile Co.	The Kirk Mfg. Co.
Locomobile Co. of America	Elmore Mfg. Co.
The Peerless Motor Car Co.	E. R. Thomas Motor Co.
U. S. Long Distance Automobile Co.	Buffalo Gasoline Motor Co.
Waltham Manufacturing Co.	

These manufacturers are pioneers in this industry and have commercialized the gasoline vehicle by many years of development and at great cost. They are the owners of upwards of four hundred United States Patents, covering many of the most important improvements and details of manufacture. Both the basic Selden patent and all other patents owned as aforesaid will be enforced against all infringers.

No other manufacturers or importers are authorized to make or sell gasoline automobiles, and any person making, selling or using such machines made or sold by any unlicensed manufacturers or importers will be liable to prosecution for infringement.

Association of Licensed Automobile Mfrs.
No. 7 EAST 42d STREET, NEW YORK



Marvelous, Indeed!

Again the genuine detachable G. & J. Tires demonstrate they are the fastest and most reliable automobile tires in the world.

At Columbus, Ohio, July 4th, Barney Oldfield broke all existing records from one to ten miles, establishing a new table of world's records as follows:

OLDFIELD'S RECORD AT COLUMBUS, OHIO, JULY 4, 1903		
1st mile	: 56 2-5	One Mile : 56 2-5
2nd "	: 59	Two Miles : 1:55 2-5
3rd "	: 59 3-5	Three Miles : 2:55
4th "	: 1:00	Four Miles : 3:55
5th "	: 59 3-5	Five Miles : 4:54 3-5
6th "	: 59 3-5	Six Miles : 5:54 1-5
7th "	: 1:01	Seven Miles : 6:55 1-5
8th "	: 1:00	Eight Miles : 7:55 1-5
9th "	: 59 3-5	Nine Miles : 8:54 4-5
10th "	: 1:00	Ten Miles : 9:54 4-5
TOTAL	: 9:54 4-5	Mile Average : 59 4-5

INSIST ON

G & J TIRES

being fitted on your automobile.

They will be furnished by manufacturers and dealers everywhere.

G & J TIRE CO.
INDIANAPOLIS, IND.

NEW YORK AGENCY, 81 Reade Street, New York City.

Stearns Cars Win at Cleveland

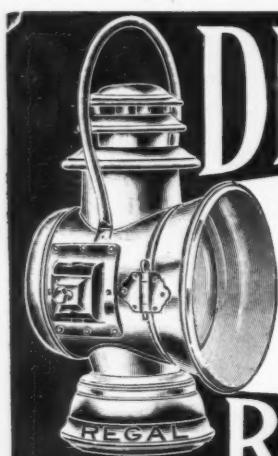


ON September 4th and 5th we won the TOURING CAR RACE (four passengers and full road equipment) against all makes. It was openly conceded before the race, that none of the other touring cars made in Cleveland or anywhere else, had any show against the handsome, smooth running STEARNS. The race was simply a runaway match; the STEARNS circling the track six times before the others had gone five.

Our touring car stripped (we do not believe in building racers) acquitted itself very satisfactorily. It was entered, started and finished in nine races (**no other car did this**) and won **two firsts** in the open events, besides **two seconds** and **one third**. Entered against us were the three American cup racers, two foreign cars of 40 and 60 horse power respectively, besides steam cars and special cars. Our car ran at an average speed of from 1:12 to 1:13 to the mile, steadily and regularly, and could be depended upon to do so race after race. It was like all our touring cars, sure, steady and regular. Our success is the talk of the Cleveland meet. The success of our touring car everywhere is shown by the list of advance orders we have for next season's delivery.

If you want the **BEST** you have got to get a STEARNS. Come and try one.

The F. B. STEARNS CO. Euclid & Lake View Aves. :::: & N. P. Transfer :::: **Cleveland, U. S. A.**



DIETZ AUTOMOBILE LAMPS
YOU WILL SEE
DIETZ LAMPS

OR AN IMITATION OF THEM ON EVERY STEAM OR GASOLINE AUTOMOBILE.

WHY? Because both makers and users of lamps saw that we had the only practical way of making **GOOD OIL LAMPS**. You will be sure of satisfaction if you insist on

Genuine Dietz Lamps.

Stamped with the Name.

R. E. DIETZ CO. LAIGHT ST. NEW YORK. ESTD. 1840

TUBING

STANDARD
TUBING

SEAMLESS

Right from the Mill.

Isn't it important that you should get as good a stock as it is possible to buy?

Then buy direct from the mill—buy where you get Front and Rear Forks, Head Stems, and Seat Posts made from tubing that has proved its worth—tubing that is quite out-of-the-ordinary—Tubing that has earned a reputation for reliability.

That tubing is **Standard Seamless Tubing**.

Quotations on application.

STANDARD WELDING CO.
CLEVELAND, O.

Still Another Trans-Continental Record FOR DIAMOND TIRES



CHICAGO, ILL., Sept. 4th, 1903.
Diamond Rubber Co., Akron, O.

Gentlemen: In regard to our tire troubles on our transcontinental trip, San Francisco to New York, will say we had very little. San Francisco to Denver one puncture only; other three tires never pumped. Denver to Chicago we found the roads very rough, and the deep wheel ruts cut the sides of the tires so we had to replace two of them. One of these is ruined, other could have been vulcanized. I think it remarkable that they stood the bad punishment they received. It should be remembered that many miles of alkali were run over, also rough mountain roads before the adobe land of Iowa was reached. The latter was passed immediately after heavy floods. Over these roads from Omaha to Chicago we made the trip in four days. I will always hereafter put my trust in Diamond Tires.

(Signed.)

L. L. WHITMAN.

Again and again Diamond Detachables have proved themselves not only THE BEST but the MOST ECONOMICAL American Clincher Tires.

THE DIAMOND RUBBER CO., Akron, Ohio.

Branches in Principal Cities.

IT IS DANGEROUS

TO DRIVE A POWERFUL CAR
UNLESS IT IS EQUIPPED WITH



Continental Tires



Men like the Rothschilds, Vanderbilts and others, who cannot afford
to risk their lives, use

CONTINENTAL TIRES

THE BEST IS THE CHEAPEST AWAYS

The Continental Caoutchouc Co.

EMIL GROSSMAN, Manager

298 Broadway, = = = = New York

POSITIONS

Mr. Employer:

If you have openings for good men, give us a chance to fill them by listing same with our Exchange Dept. It will cost you nothing and may be the means of securing just the parties you desire.

Mr. Employe:

Are you out of work or do you wish to make a change? Write us, giving particulars, and we will try to place you in a remunerative position.

Hill Climbing

is a fair test, if it's made on a stock machine. A 15 per cent grade for 970 yards was chosen for the course of the Minneapolis power test on May 16th, and the

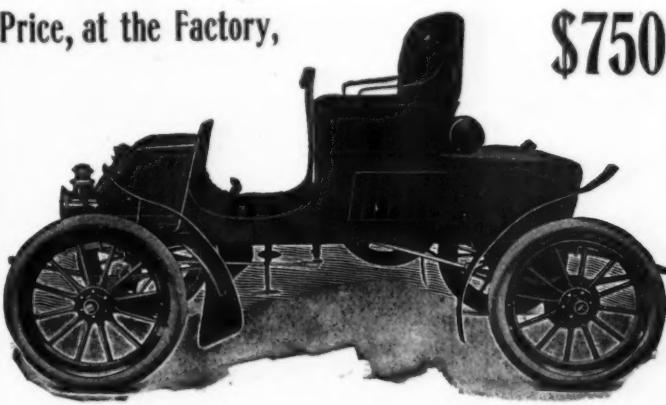
Rambler TOURING CAR

won it, beating every other motor car (and most of them were there) in its own and the two heavier classes, proving again that it is equal to the \$2,500 kind, though but one-third the cost.

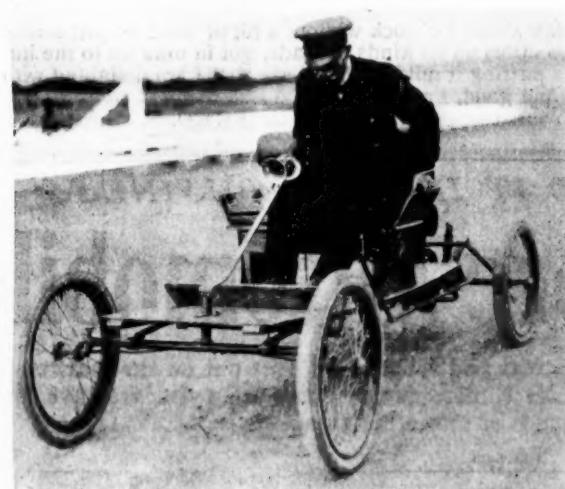
Our catalogue tells how it does the work; yours for the asking

Price, at the Factory,

\$750



THOMAS B. JEFFERY & CO., :: KENOSHA, WIS.



DR. KELLOGG,
Winner of First Prize in the Five Mile Handicap at
Del Monte, Cal., August 10.

HOWARD GILL'S AUTO HONORS.

In the automobile events Howard Gill was the hero of the day, winning both the steam and the gasoline events, and in the latter race won out from a big field of six starters, and not only won, but lapped the entire lot of contestants. In this event started Mr. Stanley Zell, 20-horsepower Winton; J. Henry Miller, 12-horsepower Duryea; Orrie

Gooden, Stanley; Thomas Goodwin, Fordmobile; and Howard Gill, Buckboard. This event was the five-mile free-for-all, and made a great race, breaking all the former track records in this state for this distance, the distance being negotiated in 10 minutes 13 2-5 seconds.

In this race Mr. Gill quickly jumped to the front and was never headed, the in-

PERHAPS YOU HAVE NOTICED

How the little ORIENT BUCKBOARD is winning first prizes in the various races all over the country. In fact, the reports of races won have been coming to us so fast lately that it is difficult to announce them all. Does it not seem strange, to say the least, to see this little machine, costing only \$375, doing up a field of the best American cars, like that at Baltimore, September 8, as described below.

terest being centered after the second mile in seeing how far he could gain on the field, and the great race the other contestants, who were closely bunched, were making. In the seventh round the Buckboard lapped the entire field, the one race really resulting in two, as long after Mr. Gill finished the other drivers were making a game fight for first place in the second bunch.

—Baltimore American, Sept. 8th.

WALTHAM MFG. CO., Waltham, Mass.

Immediate Shipment

WE GUARANTEE IT

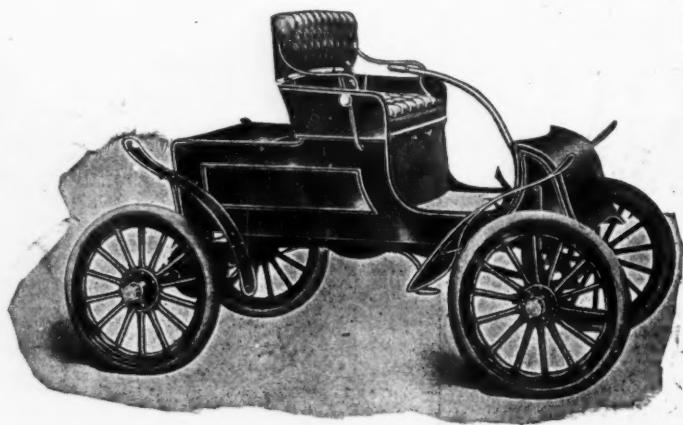
Five years ahead
of the times.

No "Kick" pos-
sible from motor.

No Vibration.

No Noise.

Backed up by
twelve years of
practical ex-
perience in motor
construction.



Northern
Manufacturing
Company

DETROIT
MICHIGAN

WRITE FOR
PARTICULARS

....NORTHERN....

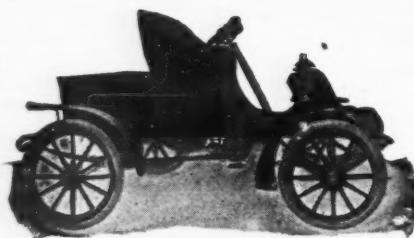
THE ELMORE MFG. CO., Clyde, Ohio.

Gentlemen:—Now what do you think of us? We arrived home last Sunday about 7 o'clock without a bit of trouble, just four days' run. Did not have even a puncture or any trouble whatever. Came over 500 miles on all kinds of roads, got in mud up to the hubs at Terre Haute and Bellefontaine, but the machine went through like a bird, and it is putting it mildly when I say that I am delighted with the Elmore. :: Hoping I may get some of my friends interested enough to do you some good, I am,

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FRED. S. CLAPP.

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Either engine will propel carriage should the other be cut out. (A very important fact.)

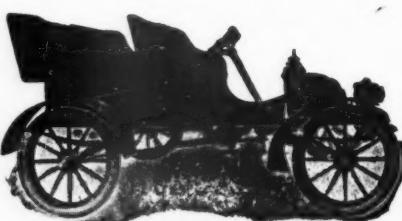
Has dynamo and storage battery. Motor will start and carriage will run on either. (Another important fact.)

You can charge the battery from the dynamo while running the carriage, which is another important fact.

Has had a practical test of over three years' manufacture.

Two first-class certificates in New York-Boston Endurance Run. Have been used in 1000-mile tours without trouble. And still more important facts.

Doctors' and Business Men's favorite car, Model 7, \$800
Tonneau Touring Car, Model 8, \$1400



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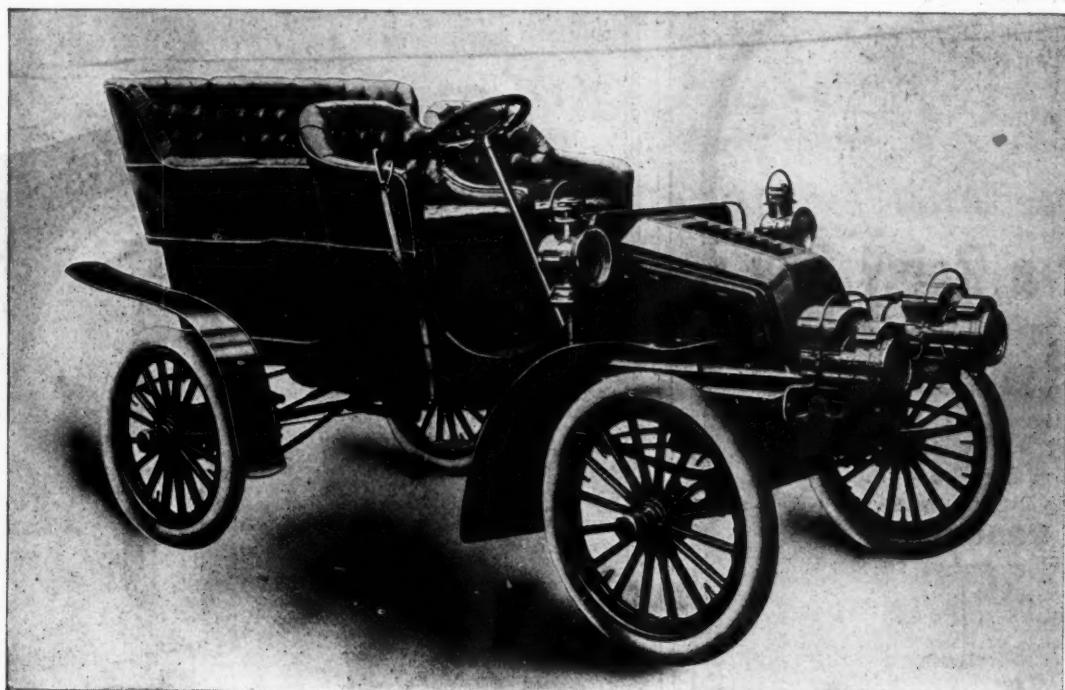
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STRENGTH
RELIABILITY



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Four passenger, weight 1,500 pounds, 10 horse power motor, normal motor speed 600 revolutions, one cylinder, 6-inch bore by 6½-inch stroke, jump spark, dry batteries, speed ratio between motor and wheels on fast speed three to one, wheel base 87 inches, track 56 inches, wheel diameter 30 inches, wheels wood, tires 3-inch Clincher, live rear axle, roller hub bearings, two brakes, hub brake on rear wheels, planetary gear transmission, speed 6 to 25 miles an hour, chain drive to axle, wheel steering, gasoline tank capacity 9 gallons, water 3 gallons, water circulation by pump and radiating coil, lubrication by gravity feed, radius on one charge 150 miles.

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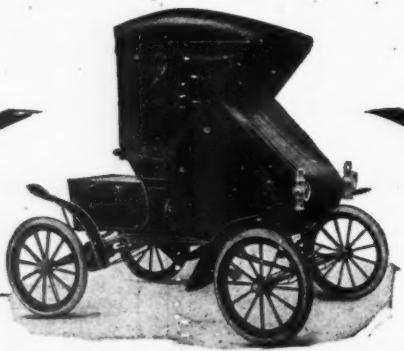
for the tire equipment. 1 mile 1.00—10 miles 10.25½. 27½ seconds better time than the previous 10 mile record held by Louis Sincholle.

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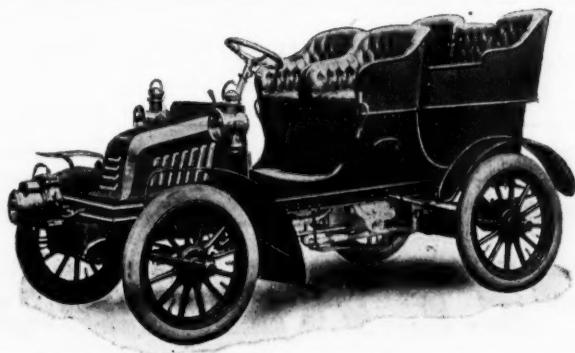
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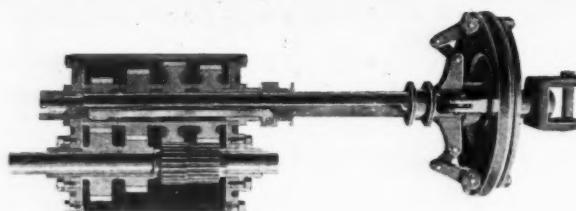
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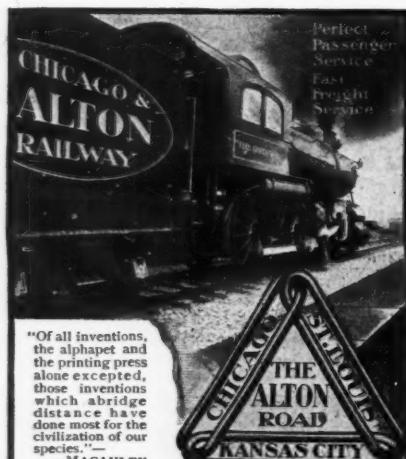
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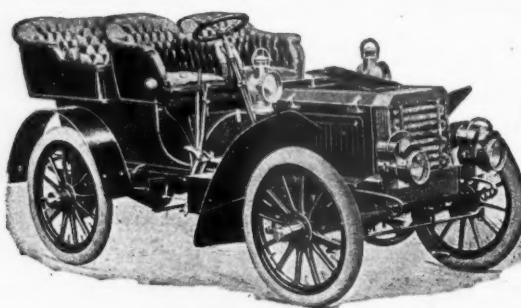
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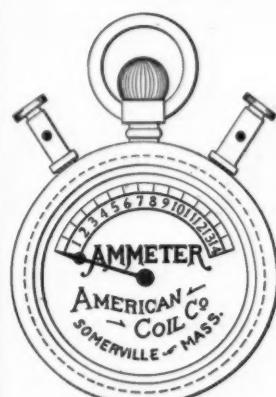


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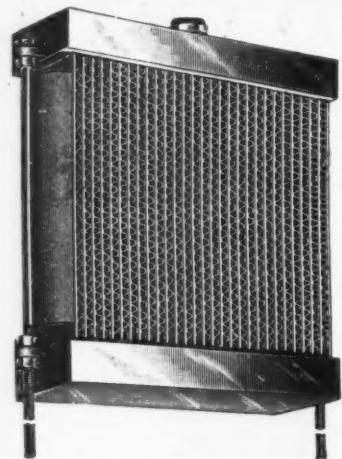


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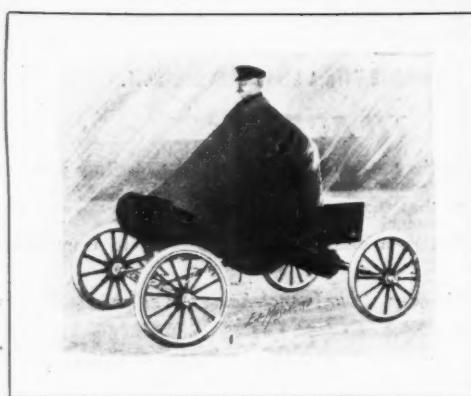


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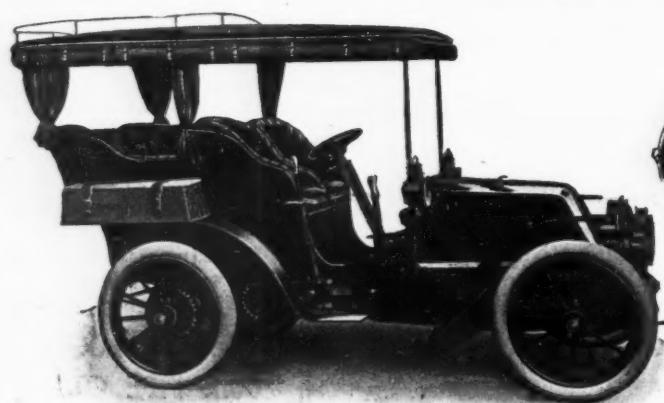
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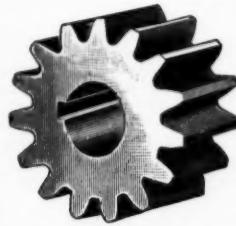
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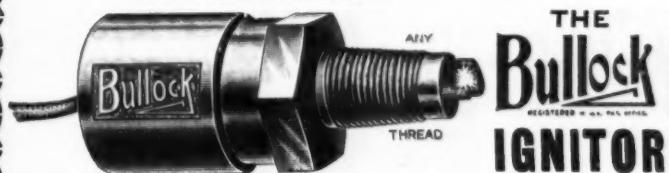
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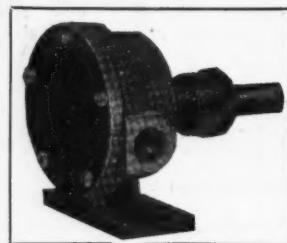
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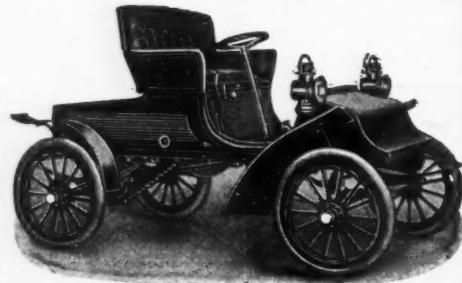
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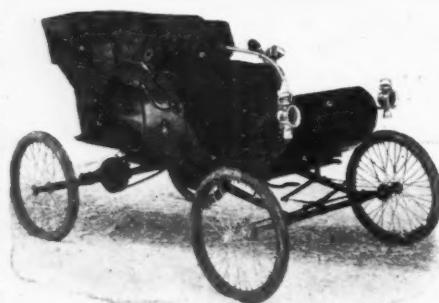


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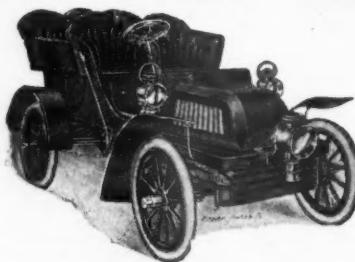
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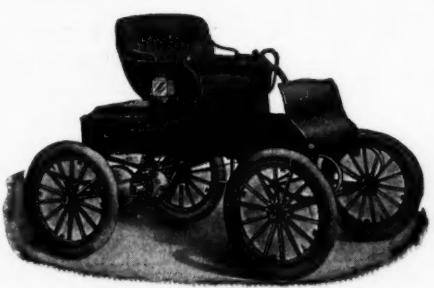
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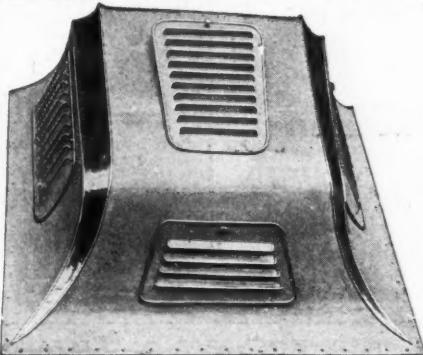
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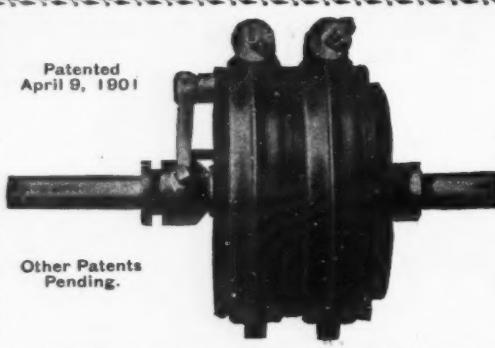
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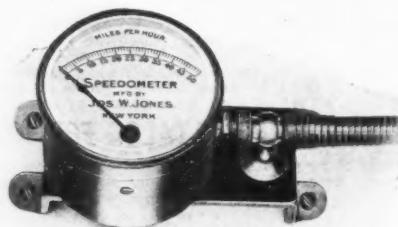
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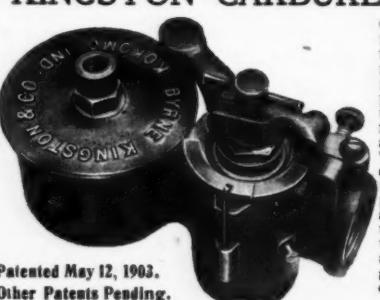
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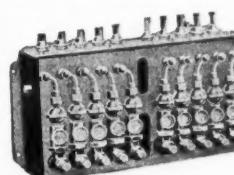
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FOR SALE—1902 Model Knox. Used but little. First class order. Refinished. Cost \$1,100. Now offered for \$700. A bargain. No better machine anywhere. C. J., care Motor Age.

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KEEP your car in shape. If you want your car to look like new, send one dollar to the Mexican Manufacturing Company, Wichita, Kansas and they will send you one bottle of Opuntia for the painted surface and a bottle of Venus Metal Polish for your lamps and metal parts.

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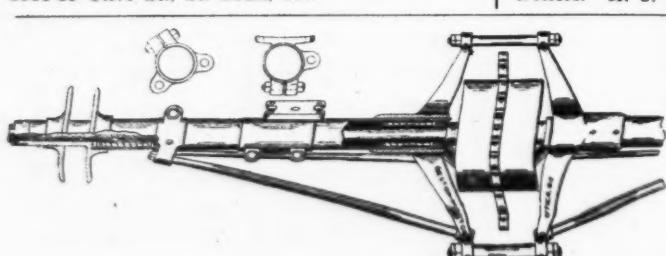
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Duryea Car wins first
award (in gasoline class)
in same contest, with
"Dunlops."

Knox Delivery Car
wins first award in New
York Commercial Contest
May 20 and 21, with "Dun-
lops." (Weight of vehicle,
3,800 pounds.)

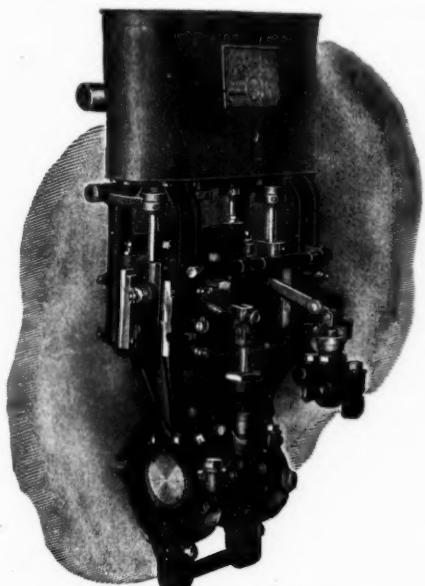
Stanley Steam Car
wins world's mile record
at Readville, Mass. May
30, with "Dunlops."

**C. H. Curtis Motor
Cycle** wins first award
in New York Motor Cycle
Club's Hill Climbing Con-
test, May 30, with "Dun-
lops."

**B. B. Bird and R.
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July 3, 4, 5 and 6, with
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They can be Relied Upon to
Stand the Test on all Kinds
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(Model "C")

includes all of the many excellencies of the original Mason Engine,
with additional features, which give it a still greater lead ahead of all
other steam auto engines.

Every part of the Mason Engine has been critically gone over,
and wherever possible, improved, strengthened and perfected in
every smallest detail.

We have made, operated and repaired more steam auto engines
than any other concern, and have concentrated in the "Model C" all
of the experience gained by this wide observation of all other engines. We do not claim that
The Mason "Model C" is a perfect engine, but do positively
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THE BEST AUTO ENGINE IN THE WORLD.

Our "Model C" catalogue will tell you all about this engine, and prove interesting to every
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A full line of parts for all Mason Engines will be found at 147 Queen Victoria St., London, England.

THE MASON ENGINE COMPANY, - - - - **158 Summer Street, BOSTON, MASS.**

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"Par Excellence"

Are you interested in the purchase of a thoroughly reliable and high grade Touring Car? Read the following letter:



Milwaukee, August 28th, 1903.

Bates-Odenbrett Automobile Company,
501 Broadway, Milwaukee, Wis.

Gentlemen:—In response to your inquiry, wish to say that I consider my recently purchased 20-horse power Winton Touring Car **par excellence**. I have already driven the car over thirteen hundred miles and it is running better every day. For strength of construction, ease of manipulation and adjustment, hill climbing and smoothness in running, it cannot be surpassed.

I took a party of five to the Wisconsin Dells and back last week, a distance of 264 miles, over the worst sand roads and hills I have ever seen. The trip via Columbus and Portage was made in the day, the odometer registering 121 miles. The return trip by way of Baraboo and Madison was also accomplished with ease in the day, the meter registering 143 miles. During the entire trip the motor never missed fire once and no adjustment of the machinery was necessary. It may interest you to know, and what proved to me a great surprise, that we did not have to replenish the water supply during the entire trip, which was made in the hottest days, on Aug. 18 and 20.

Before purchasing my touring car I was told that water-cooled machines were very apt to become overheated on long runs. If they do, the Winton is certainly an exception.

Wishing the Winton the success it deserves, I remain,

Yours very truly,

A. BERGENTHAL.

The 20-horse power Winton combines more features of genuine excellence than any other high grade car manufactured or sold in America. Price is \$2,500. We can quote prompt deliveries. * * * * Send for catalogue or visit nearest Agent

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